A First Book upon the BIRDS *of* OREGON & WASHINGTON

Wm. Rogers Lord

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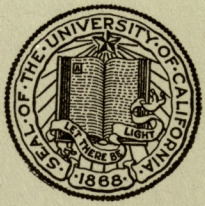

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Dr. and Mrs.
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Frank W. Weymouth.

Gambel's White-crowned Sparrow.
Nuttall's White-crowned Sparrow.

(See page 74.)

A First Book upon the BIRDS *of* OREGON & WASHINGTON

A Pocket Guide and Pupil's Assistant in a study of the more common Land Birds and a few of the Shore and Water Birds of these States.

BY

WILLIAM ROGERS LORD

Revised and Enlarged Edition.

1902
WILLIAM ROGERS LORD
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PORTLAND, OREGON.

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This Book

IS DEDICATED TO ALL BIRD LOVERS IN THE STATES FOR WHICH IT IS PREPARED, ESPECIALLY TO THE

"Knights and Ladies of the Birds"

IN THE CITIES, TOWNS AND SCHOOLS, WHO RECOGNIZE AND HAVE ACCEPTED THE TITLE, AND ALSO TO ALL THOSE WHO, THROUGH ITS PAGES, SHALL COME TO FIND IN THE BIRDS MINISTERS OF BEAUTY AND JOY

242

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INTRODUCTION.

When I came to Oregon in the spring of 1899 from the North Atlantic States, I was greatly delighted at the strange and beautiful songs of some of the birds which, from the morning of my arrival, greeted my ear. Afterward, as I set about studying and naming these new songsters, I encountered an unaccustomed difficulty. There are numerous short, simple and helpful books for eastern North America, by the aid of which a resident of that section may begin to know the birds of his own locality. But I found, upon inquiry, that there were none especially for this part of the United States. The only helps were in the large scientific works of Ridgway, Coues, and others, covering the whole or large parts of the United States — and these were to be had only in a public library, and when in hand were not easy of use. I have, therefore, made slow headway in the study of the birds of Oregon.

To save others the difficulties I have encountered, and to encourage many, I hope, to become familiar with the beautiful in the form of bird-life in this section of the country, I have undertaken to supply at least a present demand, and furnish something like a First Book upon the birds of Oregon and Washington.

The number of birds included in this little book is limited to the purpose for which it is prepared, viz: to introduce one to most of the common Land-birds of this section, except the Game-birds, and to a few of the Water-birds. The Game-birds are omitted, because it is assumed that they are well known by nearly every one; and most of the Water-birds are not given, because they are not commonly seen, are limited to the coast and waterways, are shy, and do not often attract any one except hunters and advanced bird-students. A few more than one hundred birds are described.*

The book is also limited in that it seeks mainly to help one to become acquainted with the birds by sight and song, leaving, for the most part, a

* In the second edition, the number described is about one hundred and fifty.

treatment of the habits of birds, their nesting, etc., for later study.

In the making of this book, I am under obligation to a number of friends and bird-lovers whose information has been freely given and whose criticism of my manuscript has saved me from some errors. During the weeks of writing, I was fortunate enough to have as a constant adviser and critic, Mr. A. W. Anthony, a recognized authority on the birds of the Coast, from Alaska to Central America. Also, Mr. Herman Bohlman, of Portland, Oregon, has given me his accurate observations of the more local bird-life, and Mr. Ross Nicholas, of the same place, has been as generous of his store of local bird knowledge.

I want also to acknowledge the help that Mr. Charles A. Keeler's book, "Bird Notes Afield" (for California), has been to me in making this more northern partial directory. I have been aided by his excellent descriptive list. Due credit has been given him as often as I have made use of his work.

Of course, "Ridgway's Manual" has been always by my side for reference, while Mr.

Chapman's "Bird-Life" has served me on occasion, as he will see, should he take the trouble to look into these pages.

To Mr. T. Brook White, gratitude is due for his labor, under difficulties, in photographing the birds, "half-tones" of which appear among the pages of the book.*

Thanks are due to friends for aid in manuscript and proof reading, and in copying.

In preparing the book, I have had the encouragement and constant assistance of my wife. Her deep sympathy with the subject and her literary sense have rendered her services too valuable not to have them recognized in this place.

* One of these, that of the Western Evening Grosbeak, remains in this edition. I am indebted to the Curators of the American Museum of Natural History, New York, Dr. Allen and Mr. Chapman, for the use of the birds for the five pictures composed, photographed and touched by Mr. H. C. Denslow of that institution; to Dr. C. F. Hodge, of Clark University, Worcester, Mass., for the pictures of the living Waxwing and the Robin; to Miss Ida E. Hegner, of Decorah, Iowa, for another; to Rev. H. W. Gleason for all except two of the remaining photographs of birds, living and dead. One of these, the living Killdeer, though taken by Mr. Gleason, comes through the courtesy of the "Outing" Company, New York; the other, the living brooding American Herring Gull, through the courtesy of Mr. Wm. Dutcher, of the Protective Committee of the American Ornithologists' Union.

INTRODUCTION TO SECOND EDITION.

THE introduction to the first edition of this book may stand as originally written, save for a word or two.

In sending out the second edition, so soon after the first, some statements should be made to students and readers of the book.

Three weeks after the first edition was given to the public, the Text Book Commission of the State of Oregon selected "A First Book upon the Birds of Oregon and Washington" for "Supplementary Reading" in the public schools of the State. Such action at once made necessary a new edition, to meet a demand far beyond that anticipated in printing the first one. It was almost unavoidable that a book, which was not only "a" but *the* "First Book upon the Birds of Oregon and Washington," should be imperfect and deficient, not alone on account of the

author's own limited knowledge, but also because of the ignorance, even amongst great ornithologists, of bird-life in special localities in the vast territory which our two States include — an area nearly as large as all New England plus the States of New York and Pennsylvania. In only a few places, have any authoritative observations and records been made.

The publication of his first book brought to the author, from several quarters, information profitable — both for new knowledge and for correction — to himself and to all who shall read the new edition.

For the reason given above, even this book cannot be adequate alike to the bird-life of every quarter in so large an area. No doubt some birds, not described in these pages, will be found in some particular place to be more or less common. But, using all known means of assistance, it is believed, after a careful survey of the region covered by the title of this book, that most of the common land-birds of Oregon and Washington are here described.

In this new publication, more than thirty have been added to the old list and changes (some of

them important) have been made. Particularly important are the alterations in the lists of birds under the former headings, "Peculiar," "Variety," and "Identical."

Some of the changes in the text are due to the recent renaming of birds on the authority of the American Ornithologists' Union, e. g. the change in the names of the Gambel's and the Intermediate White-crowned Sparrows.

The author closes these preliminary statements with acknowledgments again to Mr. A. W. Anthony, the eminent ornithologist upon this coast, who has been as generous and helpful in the making of this book as he was in the making of the first one, and to Mr. Frank M. Chapman, the distinguished ornithologist and assistant curator of the Department of Mammalogy and Ornithology of the Museum of Natural History, New York City, who by criticism and suggestion has been of the greatest assistance. But neither he nor Mr. Anthony is responsible for any errors that may be in these pages; to their aid rather, will be due the absence of many which otherwise might be found.

The author is anxious to make it possible for

all who own the first edition to possess the revised, as the new edition is very carefully corrected, considerably enlarged and more fully and beautifully illustrated.*

* The author and publisher has therefore authorized his agents, the J. K. Gill Company, Third Street, Portland, Oregon, to *exchange* the old for the new *School* edition for 35 cents at the bookstore, or 42 cents postpaid.

CHAPTER I.

A Word to Beginners and Teachers.

A word to beginners, and also especially to teachers in our schools, as to the kind of interest in birds which should be primarily aroused and cultivated.

I once heard a high school graduate read an essay upon Browning's "How They Brought the Good News from Ghent to Aix," in which that splendid, living and moving poem, after being killed, was minutely dissected. The essayist knew just where Ghent and Aix were and just the length of the ride; but of consciousness of the beauty in the human struggle so strongly set forth, and of enthusiasm for it, there was not a trace. Such interest in birds and flowers we may awaken in others and be led into ourselves, when, with the eagerness of a collector of stamps or coins, it gets to be a morbid passion

to catalogue our "finds," or to enter a rivalry as to who knows the most varieties or can tell the most about the birds of our own and other localities. Certainly all education should tend to ennoble character and furnish the sources of the highest happiness. If this be the end sought, then a sympathetic and æsthetic interest is the thing we must seek to get and give, in our pursuit of knowledge of birds.

Indeed, it is a pursuit fairly dangerous to our own possible enjoyment, when we set out with opera-glass and note-book to name and catalogue the birds, lest we shall be less satisfied to listen with exquisite satisfaction to some superb singer, than to get his description in our note-books. It is not a tithe as important that we should know the name and habits of a bird as that we should answer his ecstasy of song with ecstasy of delight. Dr. Henry van Dyke has given us a motto for the societies which are opposing the heartless and harmful practice of using birds for millinery purposes. It is: "A bird in the bush is worth ten in the hat." Should not every bird-student have at the beginning of his note-book some sentiment like this?

"A bird in the heart is worth more than a hundred in the note-book." In a word, let us, in the study of birds, learn to take more time to listen to the beauty of song and to look at the beauty of form, of color and of movement, than to add their names to our lists and familiarize ourselves with their curious habits.

It 's little I can tell
About the birds in books;
And yet I know them well,
By their music and their looks:
When May comes down the lane,
Her airy lovers throng
To welcome her with song,
And follow in her train:
Each minstrel weaves his part
In that wild-flowery strain,
And I know them all again
By their echo in my heart.

— *Henry van Dyke.*

In this place something must be said about the desirability of making collections of birds, eggs and nests.

Let us admit that one such collection for public use in a museum is necessary for each town or city. Beyond this we may not go. But, with

John Burroughs and others, collecting is distinctly discouraged in this little book, for the following reasons: The true interest, as above indicated, is a living and sympathetic one. And a person imperils this when, for the sake of cabinet-classification, he takes the life of birds, or robs them of their offspring, even though the offspring is yet undeveloped in the egg. Such work, so far as necessary, should be left to the few pure scientists, who, if their hearts are right, will pursue their object with a deep sense of painful necessity, and with the greatest discretion.

It is notorious that bird-collectors are apt to become perfectly ruthless in their slaughter of birds and spoliation of nests — actually stripping whole localities of every egg and nest of certain species. This is the natural consequence of substituting an artificial interest for a natural and sympathetic one.

Our love of birds can never be shown by our mounted collections any more than our love of children could be shown in the same way.

Then, it is far better to study and identify birds in the fields and woods than in a museum.

The latter is easier, it is true; but it is too easy for the true bird-lover. The bird should be alive. There is joy in bringing a living, restless bird to our eye, and in noting his "markings" and "placing" him afterward by means of book or key, that cannot be gained when we stand in the presence of a labeled, lifeless creature. In these days of abundant help from books and fellow-students, many may not need to see a collection at all.

Again as the interest in birds is becoming extensive and is being taken up by school children, should this *false* interest be allowed to arise, clearly there would be no birds, eggs or nests left.

CHAPTER II.

The Birds of Oregon and Washington.

There are no birds that belong to Oregon and Washington alone. All of the kinds found here are to be seen up and down the coast this side of the Rocky Mountains, and sometimes beyond, within certain extended limits. By the "Birds of Oregon and Washington," we mean the birds that live in this section a part, or the whole, of the year, These differ largely from the birds east of the Mississippi River. There are many species which are altogether unlike the eastern birds; while some remotely resemble their eastern relatives, and others are so much like them that they seem, to an untrained eye, to be exactly the same. But in the varieties which so nearly correspond, there is a difference, for the most part, in size,

in form, in color and perhaps in song. The birds on this coast are probably, on the average, larger than the same birds over the mountains, and, in general, within the rainy belt, the colors are darker. The difference in hue may be accounted for by the fact that there is less sunshine here. Some of the same, or corresponding varieties do not sing quite as much as do the eastern birds. Again, birds of corresponding kinds are not generally so numerous here as further east — though some varieties, common to both sections, are more numerous than in the Atlantic States. Song-birds are characteristic of inhabited lands, and multiply in proportion to human habitations in country districts. They must have open country, shrubs, hedges, deciduous trees of low and high growth, and the protection of man. If the Pacific States use diligent care, in a few years the song-birds of this coast will be abundant.

I say above that there are many birds on this part of the Pacific coast unlike those on the Atlantic. In this book, I have described or mentioned about one hundred and fifty of the birds of this section. All but about a dozen are

Land-birds, and the list covers nearly all of this class that are, in most localities, common.

Now of these one hundred and forty and more species, or sub-species, of birds, nearly one hundred belong to the region of country west of the Mississippi Valley; of the latter, forty-five are altogether confined to the Pacific Slope and a few of the forty-five to the North Pacific Slope; leaving about fifty identical in kind with eastern varieties. The lists thus indicated are given at the end of this chapter under the headings "Pacific" — meaning species or sub-species confined to the Pacific Slope; "Western" — meaning species or sub-species found upon the Pacific coast, but extending further east, some of them into the Mississippi Valley; and "Identical" — meaning, of course, the same on both sides of the continent.

One species at least, the Western Meadowlark, is found at a little distance beyond the Mississippi River but it makes no nearer approach to the Atlantic side; another, Traill's Flycatcher, is seen as far east as Ohio, but does not cross the Alleghany Mountains.

In the back of the book will be found, for the

use of scientific students, a table of the birds herein described, arranged in scientific order, with the Latin names, as given up to date in the Check-list of the American Ornithologists' Union.

PACIFIC.

Pacific Kittiwake.
Glaucous-winged Gull.
Western Gull.
Short-billed Gull.
Black Merlin. (Hawk).
Kennicott's Screech Owl.
MacFarlane's Screech Owl.
Dusky Horned Owl.
California Pygmy Owl.
Harris's Woodpecker.
Gairdner's Woodpecker.
Red-breasted Sapsucker.
Northwestern Flicker.
Poorwill.
Vaux's Swift.
Allen's Hummingbird.
Streaked Horned Lark.
Dusky Horned Lark.
Steller's Jay.
California Jay.
Gray Jay.
Northwest Crow.
Bicolored Blackbird.
California Purple Finch.
Willow Goldfinch.
Oregon Vesper Sparrow, or Bay-winged Bunting.
Nuttall's Sparrow.
Golden-crowned Sparrow.
Oregon Junco.
Rusty Song Sparrow.
Townsend's Sparrow.
Oregon Towhee.
Western Martin.
Cassin's Vireo.
Pacific Yellow-throat.
Parkman's Wren.
Sierra Creeper.
Oregon Chickadee.
Chestnut-backed Chickadee.
Coast Wren-Tit.
Bush-Tit.
Western Golden-crowned Kinglet.
Russet-backed Thrush.
Varied Thrush.
Western Bluebird.

WESTERN.

California Gull.
Band-tailed Pigeon.
Western Red-tailed Hawk.
Swainson's Hawk.
Ferruginous Rough-legged Hawk.
Desert Sparrow-Hawk.
Burrowing Owl.
California Cuckoo.
Californian Woodpecker.
Lewis's Woodpecker.
Red-shafted Flicker.
Western Nighthawk.
Black Swift.
Black-chinned Hummingbird.
Rufous Hummingbird.
Calliope Hummingbird.
Arkansas Kingbird.
Say's Phœbe.
Western Black Phœbe.
Western Wood Pewee.
Western Flycatcher.
Traill's Flycatcher.
American Magpie.
American Raven.
Clarke's Nutcracker.
Piñon Jay.
Yellow-headed Blackbird.
Western Meadowlark.
Bullock's Oriole.
Brewer's Blackbird.
Western Evening Grosbeak.
Arkansas Goldfinch.
Western Savanna Sparrow.
Western Lark Sparrow,
Gambel's Sparrow.
Western Chipping Sparrow.
Black-headed Grosbeak.
Lazuli Bunting.
Louisiana Tanager.
Violet-green Swallow.
Lutescent Warbler.
Audubon's Warbler.
Black-throated Gray Warbler.
Macgillivray's Warbler.
Long-tailed Chat.
Pileolated Warbler.
American Dipper.
Sage Thrasher.
Rock Wren.
Northwestern Vigors's Wren.
Western Winter Wren.
Tulé Wren.
Slender-billed Nuthatch.
Western Robin.
Mountain Bluebird.

IDENTICAL.

American Herring Gull.
Ring-billed Gull.
Bonaparte's Gull.
Arctic Tern.
Black Tern.
American Bittern.
Great Blue Heron.
Green Heron.
Northern Phalarope.
Least Sandpiper.
Red-backed Sandpiper.
Western Sandpiper.
Killdeer.
Mourning Dove.
Marsh-Hawk.
Sharp-shinned Hawk.
Cooper's Hawk.
American Rough-legged Hawk.
Golden Eagle.
Bald Eagle.
Pigeon-Hawk.
American Osprey.
Short-eared Owl.
Belted Kingfisher.
Northern Pileated Woodpecker.
Kingbird.
Olive-sided Flycatcher.
Skylark.
American Crow.
Starling.
Red-winged Blackbird.
American Crossbill.
Redpoll.
Pine Siskin.
Snowflake.
English Sparrow.
Cliff Swallow.
Barn Swallow.
Tree Swallow.
Bank Swallow.
Rough-winged Swallow.
Cedar Waxwing.
Warbling Vireo.
Yellow Warbler.
Myrtle Warbler.
American Pipit.
Red-breasted Nuthatch.
Ruby-crowned Kinglet.

CHAPTER III.

How to Know the Birds.

As the most attractive thing about a bird is its song, our first care must be to learn to listen to the various beautiful notes of all the different birds that we may hear in any country place or open city spot.

To learn to really know bird-songs, is to hear them without effort and by habit, wherever we may be and whatever we are doing. A bird-lover will hear a score of different songs while he talks with a friend, or reads a book; for it is one of the delights of one who has come into sympathetic touch with bird-life that he can respond to every sweet song without having his attention diverted from his usual tasks. The habit of closed ears and heart to this ministry of bird-song is characteristic of most people. Some of us have sat in a room in June, and have been

asked by friends whether there were any birds about that particular spot, while, with the windows open, not less than ten varieties of birds were pouring their melodies into the unattending ears of these people, who have never been accustomed to listen.

First, then, learn to listen! Then learn to see!

Birds are beautiful on account of their color, though in some kinds it sometimes seems dull and even ugly. Beautiful are they, too, in shape and in movement. Learn to love all these qualities, if you would truly know all about the birds. There are the nesting fashions that you will, by and by, want to watch with sympathetic interest and helpful attention — sometimes furnishing material for the roofless cottage in the tree, as you may. But in the beginning your attention will most naturally and profitably be given to the song and the appearance of the birds. It is to help you in taking these first steps that this "First Book upon the Birds of Oregon and Washington" is written.

How, then, shall you best learn to know birds by their songs and their looks? You will learn

to listen and learn to look by listening and looking — not alone when you go out to find the birds, but when you pass along your usual walks, even in the streets of a city as large as Portland or Seattle.

In the bird season, from March into July, you need not go far to hear beautiful songs and see several varieties of birds. If you are bent upon describing and learning the names of the birds, go where the birds are, taking with you a pair of sharp eyes, and better, even with these, a pair of opera or field-glasses. And then go slow!

You should often wait for the birds to come to you, while you stand, or sit, near a dead tree, or a tree with a dead top, in an open space. In an hour, eight or ten varieties have been known to visit such a tree for the bird-student. Let your movements be quiet as you go about. Raise your glasses slowly. A hasty motion will frighten the object of your attention. You should have a note-book with leaves made something after the pattern of the one in the back of this book, and put down the best description that you can of the several birds that you see;

then, by the aid of this book, or another, find the names of the birds whose size, color, etc., you have thus noted. Do not undertake to name too many at once. Get thoroughly acquainted with the looks and the song (if the birds have a song) of two or three varieties before you anxiously try to place others. It is easy to get confused at first.

The best time of day is, of course, the early morning or the late afternoon hours.

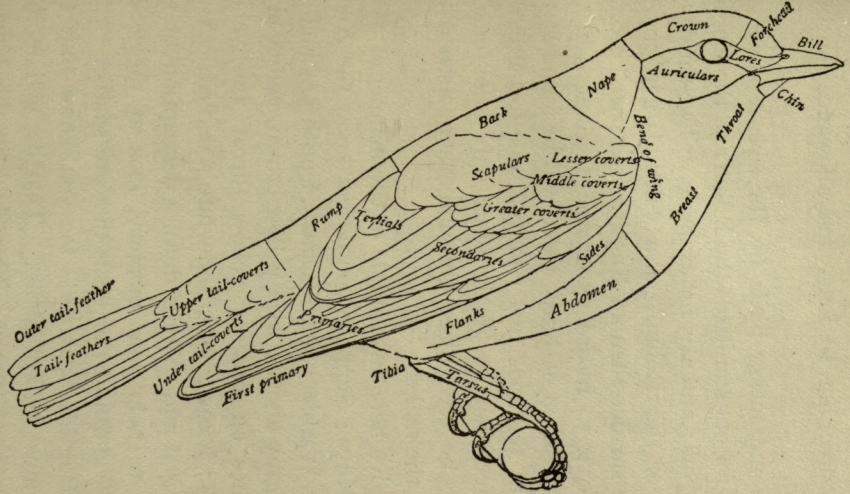
CHAPTER IV.

How Birds are Described in This Book.

Note 1. The order in which the birds are taken is mainly that of interest and discovery, rather than the artificial one of ornithological classification. The latter association is left for later study.

After naming each variety of bird, there is first given a "General Description," which is intended to answer to the first more superficial impression which one receives of a bird, not having had time to see in detail what it is like. A more "Particular Description" follows, but one not too particular or technical for the aid of young people, or of those who lack the ability to use easily scientific terms.

Note 2. By "length" of a bird we mean the distance from end of bill to tip of tail, were the bird dead and stretched out. The living bird is,



Topography of a bird

of course, not so long, and allowance must be made.

In measuring birds by the eye, it is well to take for our standards the Robin and the English Sparrow; and say, for example, "Two-thirds the size of the Robin," or a "little larger" or "a little smaller than an English Sparrow," etc.

NOTE 3. In order to assist beginners in the identification of birds, there will be found at the end of the book two "Keys," one for size, and one for color for male birds only; the females must be recognized through their association with the males.

I give here an example of the manner of using the Keys: Suppose you do not know the Audubon's Warbler, which is small, length 5 ½ inches; soft gray above; with yellow crown, yellow side-patches on breast; yellow throat and yellow rump; breast, black and white streaked. After seeing it and writing down a description of the bird, to help your memory, look at the "Size Key" and find the birds that are smaller "than the English Sparrow," for you know that the bird must be in that list. That list will include thirty-three names. Then look in the Key for

Color for "Birds Markedly Yellow or Orange," and you will find among them only seven of the thirty-three in the list on size which you have just consulted. The bird must be one of the seven. Find in the Index, in turn, the names of these seven birds; then refer to the pages where descriptions of these birds are given, and in a few minutes you will have identified your bird.

Another example: Suppose it were Steller's Jay that you had found; you would look in the Key for Size for "Birds much larger than the Robin"; then turn to the Key for Color to the list under "Blue and Bluish."

At the end of the book will be found two models for making a note-book for writing down descriptions of birds. One, for a "General Description," to be used when the bird has been seen only in a general and superficial way; the other, for a "Particular Description," and to be used for more detailed observations.* The

*The model for the Particular Description is based upon the "Topographical Bird," to be seen at the beginning of this chapter. The bird is kindly furnished by Mr. F. M. Chapman, in order to enable students in Oregon and Washington to use the "Bird-Lore's Field Identification Blank," prepared by Mr. Chapman, and sold at about cost. For ten cents, these books will be sent postpaid by the J. Horace McFarland Company, Harrisburg, Pennsylvania.

models are followed by a number of blank leaves, upon which may be kept the growing list of birds as they are learned. They may also be useful for other permanent notes, such as notes upon migrations, arrivals and departures; upon the birds which we see in early or in mid-winter, etc.

CHAPTER V.

How to Name the Birds.

The order in which the birds are taken in this book is elsewhere stated to be "mainly that of interest and discovery rather than the one of artificial classification."

Applying this principle here, those birds are, to a considerable extent, taken first which are most attractive in point of beauty or habit, and which are also sufficiently common to be, on all sides, evident.

"Discovery," however, must wait upon seasons,—and thus the "seasonal" idea must in some important degree determine our order. Yet a strictly "seasonal order" is not always convenient for the student. And, therefore, in some instances, especially where different species of the same family of birds are all present in a locality at one time, and through experience are already associated in the minds of people, though

some are permanent and others are only summer residents, they are treated together as a family, and then individually in succession, as, for example, the Wrens and the Gulls.

The season which the author has in mind, in beginning the following descriptions, is for the latitude of southern Oregon, January 20th; for Portland, February 1st; and for northern Washington, February 10th to 15th.

The seasons are supposed to move on, in the book, with the months, till one arrives at the "Winter Birds." We should remember, however, that the summer birds, are, for the most part, to be observed by July 1st.

For a full course of study, the student is referred to the last chapter of the book, "A Course of Study upon Birds for Schools and Bird-Students."

Now let us try to name about one hundred and fifty varieties of birds to be heard and seen in some part of the territory for which this book is prepared.

THE WESTERN ROBIN.

GENERAL DESCRIPTION:

Upper parts: black head and gray back.

Under parts: rufous or reddish.
Length: 10.5 inches.
Found in open country and orchards.

"Everybody knows the Robin," you will say. "Why trouble to tell us anything about him?" Do you really know much about him? Are you sure you know his song? Not if you think all Robins sing alike. They do not, any more than all people who sing, sing alike. If you listen to the several Robins that you may hear upon some fine morning, notice how their voices are like human voices, in that some are sweeter, far sweeter, than others. The Robin belongs to the Thrush family, and sometimes one gives us what you may recognize for its peculiarly enchanting quality — a Thrush-song. The Robin is a "common" bird, but he is like children — not to be despised on that account. The farmers sometimes hate him and kill him as an enemy, being unwilling to allow him the comparatively small pay he asks for the unmeasured good he does them in the quantities of harmful worms he devours. A pair of Robins sometimes take more than one hundred cut-worms in a day for themselves and their young.

After nesting time, Robins are rovers, and in large flocks may be seen in every part of the country.

PARTICULAR DESCRIPTION. — Head and tail, blackish; throat, white, streaked with black; eyelids, white; back, gray; breast, rufous or reddish; abdomen and under tail-coverts, white. The young have speckled breasts.

Nearly all Robins are migratory; some spend the winter south of Oregon, and some coming from further north remain with us. A few may be permanent residents. In early February the northern migration begins, and an occasional song may be heard. In March the Robins will welcome every dawn and early riser.

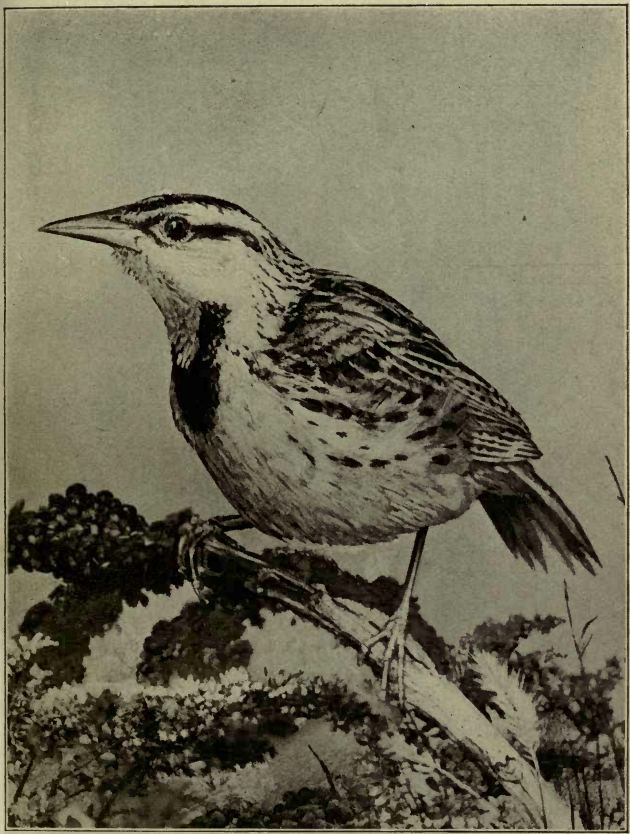
THE WESTERN MEADOWLARK.

GENERAL DESCRIPTION:

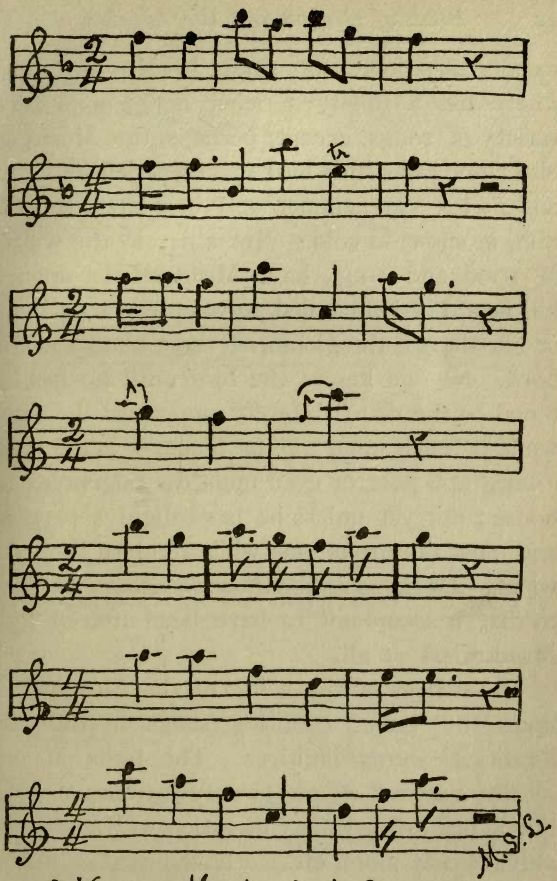
Upper parts: brownish-gray.
Under parts: yellow and black.
Length, 10 inches and more.

Found in open fields.

If this part of our country had no bird except the Meadowlark, it would, in respect of bird-song, be blessed above any other land I know. Such a rarely beautiful, endlessly varied and



Western Meadowlark.



Western Meadow Lark Songs.

wonderfully incessant singer! No bird anywhere has a fuller or richer note; none such variety of songs, except, perhaps, the Mocking-bird; none like this bird makes varied and joyous melody in summer and in winter, too; in rain, in snow, in cold. Not a day in the winter of 1900 and 1901, have Meadowlarks upon a hill near Portland failed to voice the happiness, or bid depart the gloom, of their human neighbors. No one knows the bird until he has listened to the many different songs that he sings while perched upon tree or fence, or again upon a telegraph pole, or even upon the ridgepole of a house; nor yet unless he has caught a peculiar and most rapturous song while the bird is on the wing — a song so unlike those we are accustomed to that it seems not to have been uttered by a Meadowlark at all.

The variety of the songs of the Meadowlark upon this coast, counting songs in different localities, seems limitless. The birds in one locality may not exceed twenty varieties of song, but a few miles in any direction will add, probably, twenty more, etc. I have heard at Forest Grove, in Oregon, five new songs from the same

3
3
I.
8va.
8va.
II.

bird, in the course of twenty minutes, and in the suburbs of Tacoma, as many others, in the same time, from a Meadowlark there. The song goes from a clear, flute-like whistle, through distinct and varied melodies, to a brilliant roulade — the latter, as I have before indicated, being executed upon the wing.

Ernest Seton-Thompson says of the Meadowlark, in his "Birds of Manitoba," "In richness of voice and modulation it equals or excels both Wood Thrush and Nightingale, and in the beauty of its articulation it has no superior in the whole world of feathered choristers with which I am acquainted." This is high praise, and yet I suspect that he could not have heard the variety of song in that part of the continent which the same bird (as classified by ornithologists) gives on this coast. At all events, the Meadowlarks of Minnesota, when I heard them, though beautiful, as Mr. Seton-Thompson describes them, as far as they went, failed to attract me by the variety of music that I instantly noticed here.

But his estimation of the quality, modulation and articulation of the song of the bird that he heard, is not overdone, unless, perhaps, we ought,

in justice, to say of the bird, there and here, that its only blemish as a singer is that it usually ends its melody too abruptly. The Wood Thrush, to which Mr. Seton-Thompson refers, lets its final note melt into the air. Still, at times and at a little distance, I have heard an extraordinary singer among our Meadowlarks give the effect of the Hermit Thrush of the Eastern States—that bird which John Burroughs calls the most spiritual of singers.

The Meadowlark of the East, though almost the same as ours in color, size and form, has, in comparison, a very thin, though sweet, voice and a more unvaried song; it is never seen so near human dwellings as is the Western Meadowlark.

This bird nests in the grass, and early in the season. Its young are sometimes on the wing by May 25th.

It should be stated here that the Meadowlark, though called a "Lark," is, properly speaking, not a Lark at all, but belongs to the Oriole family.

During the past year, my wife has written down a few of the songs of these birds, heard

from our window, and seven of them are here given by way of suggestion.

Through the kindness of Mr. A. F. Hofer, of Chicago, and of his son, Mr. A. F. Hofer, Jr., of Salem, Oregon, I have, in my possession thirty-one Meadowlark songs noted down by the former, who was once a bandmaster in Germany, and as a boy in the Black Forest was gifted with powers to imitate the most difficult bird-songs. Upon a second page, four of the most striking and characteristic of these songs (I.) are given, with three more (II.) taken from some published in the "Auk," January, 1896, by Mr. L. Belding, who wrote them down in Gridley, California.

Mr. Hofer heard all but three of the thirty-one songs mentioned, near Salem, Oregon. He says of these birds, "I never heard more than one sing the same notes, although several sang in the same key, yet with a different rhythm."

PARTICULAR DESCRIPTION. — Head, back and tail, brownish-gray, streaked with lighter shade, with a pale line down the top of head and another over the eye; all below, yellow, with a black crescent upon the breast; sides, gray, streaked with brown.

To be found always in farm-fields and in all open places about towns and cities.

To a considerable extent, a permanent resident.

THE WESTERN EVENING GROSBEAK.

GENERAL DESCRIPTION:

Old gold, nearly all over; large white patches on wings; very large bill.

Length, 8 inches.

Found about towns and country places some seasons from February into May.

This is the most beautiful late winter and spring bird in our section, and one of the most beautiful birds that we have at any time of the year. The Grosbeak comes from homes largely unknown, from the Coast Range, the Cascade Mountains, and perhaps, in part, from the Sierras. No one has yet found their nesting-places. Only two or three nests have been reported, and these were apparently accidental, but the birds have been seen at nesting-time in the Cascade Mountains in southern Oregon, by A. W. Anthony, and Messrs. Finley, Bohlman, and Nicholas had evidence of their presence in the

Coast Range Mountains in June, 1901. They leave their summer feeding-ground, when severe winters drive them to the open country of western Oregon and Washington, here to thrive upon abundant food which they find in maple tree seeds, etc. The huge size of the bill indicates the use which these birds make of them in cracking pine cones.

Though nesting so far from the habitation of man, they are wondrously tame, as they appear in flocks in our City Parks, and upon our lawns. So friendly already, it is easy to win further their confidence, and induce them to eat out of the hand. A lady of Oregon City, in the winter of 1898–99, succeeded in bringing numbers of these beautiful birds to sit upon her arms, hands and lap. The writer has two pictures of this winsome woman with the Grosbeaks thus confidingly resting upon her person. One of these pictures is given in these pages. In the winter of 1900–01 some of the same birds returned after two years' absence, — the identification being established by certain unmistakable marks, like the blindness of one in one eye, and the misshapen leg of another.

Tame Grosbeaks in Oregon City.

The explanation of the fearlessness of these birds is found in the fact that they are not familiar enough with the bird-stoning and killing propensities of human beings to keep at a safe distance. Every wild and fearful bird is a sad comment upon the savage treatment bird-life has received at the hands of man. And every such familiar intercourse as that between this bird-lover in Oregon City and the birds, indicates what, if we will, may be the future relation between us and these angels of song and beauty.

The Evening Grosbeak has no song proper while with us, but has such a musical conversational note that we long some day to come upon the quiet family in their summer homes; where if their love-song is one-half as sweet as the songs of other Grosbeaks, we know it must be sweet indeed.

These birds must be very numerous, as reports from different parts of these States show that, in large flocks, they cover a wide territory.

PARTICULAR DESCRIPTION. — Male: Crown, black; neck, sides of head, throat, breast, and abdomen, rich olive-yellow or old gold; color darker on back, shading lighter yellow to tail-coverts; white patch on wings;

yellow line on forehead, extending over each eye; black upper tail-coverts and tail, and outer wing-parts; light yellow under tail-coverts.

Female: Prevailing color, buffy or yellowish-brown instead of old gold, with small white spots on wings.

Transient resident.

THE RUSTY SONG SPARROW.

General Description:

Upper parts: rusty brown.

Under parts: breast, white, dashed with long brown spots, with a larger dusky spot in the center.

Length, 6 inches.

Found in hedges and low growths.

Every part of temperate North America has a Song Sparrow of some variety. Eastern Oregon and Washington have one that is distinguished for his dark, rusty color, except upon his breast, which resembles that of the other members of the Song Sparrow family in that it is grayish-white in background, with frequent dark brown spots, and a larger dash of the same color in the center.

This little bird is, in a number of respects, in great contrast with the White-crowned Sparrow,

which will be with us in April, and will be described later. While the White-crowned Sparrow usually sits quietly and moves somewhat sedately, the Rusty Song Sparrow has a nervous, twitching movement (not unlike the Wren), with something akin to a fretful air, with head feathers somewhat erectile and tail elevated, indicating disturbance. Again, while the White-crowned Sparrow sings inveterately, the Rusty Song Sparrow is a little chary of exhibiting his fine vocal powers. But, when he does sing, his voice does credit to the Song Sparrow family — the members of which everywhere are notably sweet musicians. He is often found with us in the winter time, and occasionally his song may be heard on a sunny day.

These Sparrows may be found in hedges, shrubs and trees of low growth. When they sing, they mount to the top of some shoot taller than the rest, and can be easily seen and studied through the glass.

PARTICULAR DESCRIPTION.—All above, rusty-brown; the breast, as described above; abdomen, grayish-white.

Partly a permanent, and partly a summer, resident.

THE RED-SHAFTED FLICKER.

GENERAL DESCRIPTION:

Upper parts: brown, barred with black, with white rump.

Under parts: light reddish-white, spotted with black; under the wings, salmon-red. A conspicuous black crescent on breast.

Length, 12 to 13 inches.

Found everywhere, very often about houses.

It is necessary to give the next place to the familiar, cheery, beautiful and altogether splendid Woodpecker, that haunts town and country alike, sometimes rapping upon houses with his strong bill, entering them through open windows, and even occasionally forcing his way in through doors which he has made for himself, if left undisturbed in his work. This bird is familiarly known as "the Flicker." He has many other names in other parts of the country, and is here sometimes called the "Yellowhammer," after his eastern cousin—though the name is misapplied, since the Flicker of this coast has red or salmon color in place of the yellow which is characteristic of the eastern species. "Redhammer" would be the appropriate name for

this prying creature, which hammers so often and so vigorously against tree or house. And as his eastern cousin is sometimes called the "Yellow-shafted" Woodpecker, we may call this the "Red-shafted Woodpecker."

Notice his loud call, salute or signal, from some high perch: "Kee-yer, kee-yer." In spring and sometimes at other seasons, his "Wick, wick, wick, wick," rapidly repeated, may be often heard; and his soft affectionate "Whee-hew, whee-hew, whee-hew" during courtship or in friendly company. This bird is beautiful in color, in form, and in movement, whether the movement be on the wing, in undulating flight, or while searching the bark of a tree for grubs or ants. It is a question how far our objections to this splendid bird's noise about our houses, and forcible entrance into them, might be removed, if we came to love him as we do the domestic pets, whose pother and destructiveness we put up with. The Flicker nests in holes in trees, which he makes with his strong bill.

PARTICULAR DESCRIPTION. — Male and female: Head and neck, gray (Anthony says, "rarely with red crescent across back of neck"); back, grayish-brown

and barred with black; rump, white; tail, black above and salmon below; mustaches in the male, red; breast and under parts, soiled white, or very pale vinaceous, spotted with black; black crescent on breast.

The Flicker is a permanent resident.

THE NORTHWESTERN FLICKER.

There is a variety of the Flicker more or less common in our section, especially in its northern part, which so nearly resembles the "Red-shafted" that few persons will probably care to distinguish it from the latter bird. It is known as the "Northwestern" Flicker. No doubt, even bird-students in certain localities have seen scarcely any other, and have supposed it to be the "Red-shafted"; and for the average student, perhaps it is just as well not to try and make a distinction. The distinction is found in general in the darker colors of the "Northwestern."

"Back, deeper brown (sometimes of a warm umber tint); lower parts, deeper vinaceous; throat, deeper ash-gray (sometimes almost lead color); top of head, deeper brownish."—*Ridgway*.

THE WESTERN BLUEBIRD.

GENERAL DESCRIPTION:

Upper parts: blue.

Under parts: chestnut.
Length: 7 inches.
Found about houses and in the open country.

What so gentle reminder that spring is at the door as the Bluebird by your house in the country or suburb, with his soft notes and refined air, carrying with him the color of the sky? He comes no stranger to your home, if in the previous spring and summer he has found provided a small house in which to brood two (perhaps three) families, according to his success. If you wish to invite to the hospitality of your home numerous pairs of these gentlemanly and ladylike creatures, build for them suitable houses. The song of the Western Bluebird is not full, but is, like his manners, gentle and sweet.

PARTICULAR DESCRIPTION.—Male: All the upper parts, sky-blue; throat, breast and sides, cinnamon-red; abdomen, white. In autumn, the blue is a rusty wash. Female has duller colors.

The Bluebird may be seen occasionally in the winter season, and his arrival from the South is like that of the Bluebird of the East, an early one, often in the first week of February.

THE MOUNTAIN BLUEBIRD.

GENERAL DESCRIPTION:

Upper and under parts: azure blue.

Length, 7.5 inches.

Found east of the Cascade Mountains, where it breeds, and is seen in other places occasionally.

This species of the Bluebird is much finer than the preceding one, being somewhat larger and more exquisite in color, and by some it is thought to be the most beautiful of our North American birds. Its habit of nesting in holes, in trees and stumps, or about a shed in a mining camp, is like that of the more common variety in our western section. Its song is not unlike that of its western relative, being soft and sweet.

PARTICULAR DESCRIPTION. — Male: Above, glassy cerulean blue; below, lighter blue; abdomen, and under tail-coverts, white.

Female: Above, brownish-gray; wings and tail, bluish.

BREWER'S BLACKBIRD.

GENERAL DESCRIPTION:

Black all over.

Length, 9 inches.

Found generally in the country and about large open grounds in towns and cities.

This is the Blackbird of the Pacific coast from California northward. It is abundant; and nearly always, except when nesting, is to be seen in flocks. The bird has marked peculiarities, in the very white eye and in the impertinent challenge-note it utters to any one who happens to intrude upon its nesting-place or to come upon it while it is eating. When nesting, it will saucily and unexpectedly dash against a man's hat and pursue him for yards in the man's own enclosure, while yet the nest has not been closely approached. But these peculiarities add interest and charm to the bird, in the eyes of the bird-lover.

His song is not strikingly beautiful, but has its own special quality, which goes with the bird-chorus to render enchanting a spring day.

No doubt this Blackbird does some damage to a farmer's crops for a time; and it may need watching and frightening off till the time for harm is past. But let the farmer remember that for the most part of the year these vigorous birds, in pairs and in flocks, devour thousands of bushels of harmful insects and worms, and quantities of the seeds of weeds in our wide territory.

The multiplication of insect-life is the natural result of destroying birds. They are worth many times more to us for beauty, fellowship and use, than the price they ask in fruits and grains in a brief season.

PARTICULAR DESCRIPTION. — Male: Glistening greenish iridescent-black.

Female: Brownish-black, no gloss.

Mostly a summer resident. A few remain the year round.

EUROPEAN HOUSE, OR ENGLISH, SPARROW.

GENERAL DESCRIPTION:

Upper parts: dusty brown.
Under parts: dull grayish.
Length, 6 inches.

Found in towns and cities.

This bird must have a place in our list in order that he may be recognized, and that we may, as much as possible, discourage his dwelling in our neighborhood. He is an imported bird, as his name suggests, and has brought to our native American birds only trouble, and to our American people only regret. It is not easy to speak against any bird; but this one seems to compel

all bird-lovers to except him from their sympathetic attention. He has no song that may be called such, mostly putting forth a querulous sort of cry. He comes, like the tramps and loafers, to the towns and cities, there to fall upon and drive away all other feathered dwellers, and he has power to multiply so rapidly that a few now will become a legion in two or three years. These birds have not become numerous in Oregon and Washington yet, and it is hoped that Bird Societies will take the matter in hand and authorize intelligent, skillful and humane agents to reduce and keep down their numbers. Such work is not for boys, who may mistake other Sparrows for these pestiferous, quarrelsome and destructive birds; and, in killing these, cultivate a taste for killing birds in general, and also harden hearts too apt to undergo this process in life.

To show with what rapidity these birds may multiply, a bulletin issued by the United States Agricultural Department states that one pair, in ten years, may produce 275,716,983,698. This calculation, of course, assumes that all eggs will hatch and all progeny survive in the line. This Sparrow is to be found in the spring, having

already pre-empted for its own use every bird-house built for Bluebirds, Swallows and Wrens, and forcing its nest into every covert, nook and corner about buildings.

PARTICULAR DESCRIPTION.—Male: Ashy above, with black and chestnut stripes on back and shoulders; wings, chestnut, with white bars bordered by black line; gray crown; middle of the throat and breast, black; abdomen, grayish-white.

Female: Paler; wing-bars, indistinct; no black on throat and breast.

Permanent resident, wherever found.

THE OREGON TOWHEE, OR CHEWINK.

GENERAL DESCRIPTION:

Round body; large black head; sides of breast, reddish-brown.

Length, 8 inches.

Found in bushes, and often upon the ground scratching in the leaves.

The boys hereabouts know this particular kind of bird as the "Catbird," because it has an alarm-cry very much resembling a cat, but not so distinctly resembling this animal as the "Catbird" proper of the Eastern States.

The names "Towhee" and "Chewink" are

Towhee, or Chewink.

given the common eastern variety of this species because his usual happy call seems to sound like one of these words. If the family were to be named from the characteristic call of the Oregon variety, it would not receive its present designation.

The Towhee is sometimes called the "Ground Robin," because the sides of his breast so closely resemble the Robin's breast in color, and because he so persistently digs and delves under the leaves and about the roots of bushes for the grubs which are his principal food.

He is a very individual bird, and often seems to go tumbling rather than hopping about in the bushes, hiding in the deepest thickets from your sight, but always keeping you within his own vision.

His song is given from the highest bush in the clump, or from the top of a low tree, and is sometimes like the musical trill of a large insect. He is distinguished for a very red eye.

PARTICULAR DESCRIPTION. — Male: black head, back, tail and neck; wings, slightly spotted with white; breast, white center, reddish-brown sides; abdomen, white.

Female: Sooty above; sides of breast, rather deeper red.

Partly summer, and partly permanent, resident.

THE RUFOUS HUMMINGBIRD.

These States, like those of the East, have in most parts but one variety of the Hummingbird, out of the eighteen in the United States and the 350 in North and South America. The greater number are in the tropical regions in these continents. The only one generally distributed in our States is the Rufous Hummingbird. But in certain localities in mountainous regions, and in other favorable spots in the large area which these States include, ornithologists have noted the presence of at least three other species of this interesting family; namely: the Allen's, the Calliope and the Black-chinned Hummingbirds.

The Rufous Hummingbird is dainty, like all of the family, beautiful and very abundant. His appearance is the nearest to a suggestion of a sprite that any bird gives us. So far as he seems material, he carries with him the appearance of a "winged gem," or again of a winged

flower. So sensitive does our little bird seem, that we could hardly expect it to enter our climate until late June or early July, after the cold rains have passed. We never can quite outgrow, through familiarity, the sense of surprise and even of amazement, when this little breath of a bird flits before our eyes in March. And yet that is what he does as often as March comes round. Nor are we prepared to find him, as he has been found, nesting on the mountain side 8,000 feet above the sea. But we know from experience that this is his hardy nature and that he is ready for the honey in the first flowers, and for the first aphides upon the tender foliage. The hum of his wings, moving too rapidly for our sight, will announce, at the same time, his arrival and his readiness to feed our eyes and hearts again with his ever-new evidence of "beauty, wonder and power."

PARTICULAR DESCRIPTION. — Male: Head, metallic green; same color sometimes down back; back, lower tail-coverts and breast, rufous; throat and ruff, or gorget, coppery-red; below this, a white collar.

Female: Back, green instead of rufous; only a trace of metallic feathers on breast.

Length, 3.5 inches.

Summer resident.

THE ALLEN'S HUMMINGBIRD.

Length, 3.25 inches.

No doubt the Allen's Hummingbird is sometimes seen by people who mistake it for the Rufous, so much are they alike — especially the females. But close observation will reveal the former bird here and there, throughout our States. In one place at least, Gray's Harbor, Washington, the Allen's Hummingbird was reported in 1892 as being equally common with the Rufous. There are probably other such localities. Although these two members of the Hummingbird family resemble one another so closely, they may be distinguished by noticing the birds very carefully and marking the differences indicated in the descriptions.

PARTICULAR DESCRIPTION. — Head and back, bright metallic green (in the Rufous Hummingbird, the metallic green only occasionally extends down the back); tail-feathers of the Allen's, narrow, while the same feathers of the Rufous are broad, and a notch in the second feather from the middle of the Rufous Hummingbird's tail, is wanting in the Allen's.

THE CALLIOPE HUMMINGBIRD.

Length 2.75 to 3 inches.

In most parts of our States, the Calliope Hummingbird will not be seen at all, but in some of the higher altitudes it is reported as rare, and in others as common. It is found in numbers in Klamath County, Oregon, and in Chelan County, Washington. Its nests are built in pine trees from eight to fifteen feet above the ground and have the curious shape of pine cones. This bird is a source of great delight to those who have made its acquaintance.

PARTICULAR DESCRIPTION. — Male : No metallic on crown; feathers of gorget, narrow and elongated, white at the base, with metallic purplish or lilac tips; tail-feathers, plain dusky, edged with rufous towards base; sides, tinged with greenish-rufous.

Female: tail-feathers, tipped with white; throat, whitish, sometimes spotted with metallic violet.

Summer resident.

THE BLACK-CHINNED HUMMINGBIRD.

Length, 3.5 inches.

This bird, rare in this section, is the western representative of the Ruby-throated Hummingbird of the East, and it will be recognized at

once by the mark which its name indicates, viz.: the black, velvety chin and throat, bordered by a band of metallic violet.

Summer resident.

THE RED-WINGED BLACKBIRD.

GENERAL DESCRIPTION:

Male: All black, except shoulder-patch (which is scarlet).

Female: Streaked brownish and white.

Length, 8.5 inches, more or less.

Found in nesting-time about bogs and marshes.

The beauty of the "Red-wing" is recognized by anyone who sees it; and his musical song quite naturally suggested to Emerson the line,

"The red-wing flutes his O-ka-lee!"

Yet, in spite of his beauty of color and sweet song, to many farmers he is a detestable enemy. When the farmer learns that seven-eighths of the Red-wing's food is made up of weed-seeds or of insects injurious to agriculture, he will, perhaps, be willing to share his crop with the birds which have helped him to raise it.

PARTICULAR DESCRIPTION. — Male: Coal-black; shoulders, scarlet, bordered with a brownish-yellow band.

Female: As above.

Partly permanent resident.

THE BICOLORED BLACKBIRD.

The Bicolored Blackbird is like the Red-winged Blackbird, except that there is no intermediate color between the black and the red, — only the two colors indicated by the name. The Bicolored is common in many parts of Oregon and Washington, and many people do not distinguish it from the Red-winged proper, which has a pale band between the red and the black of its wings. Its habits are about the same as those of the latter bird, and its beauty is as striking as his.

Summer resident.

THE YELLOW-HEADED BLACKBIRD.

DESCRIPTION. — Head and breast, bright yellow in male, but, in full plumage, the yellow sometimes wanting or obscure on head; wing-patch, white; rest of body, black.

Female: Brown, with yellow throat.

Length: male, 10 inches; female, smaller.

Found in marshes and their neighborhood.

This species of the Blackbird is reported as

common in Grant County, Oregon, and has been seen, in larger or smaller numbers, here and there, in both of these States. It is to be found in company with the Red-winged and Bicolored members of the family, where marshes give opportunity for nests among the reeds. The bird nests in many places, from the Mississippi Valley to the Pacific coast. In the former locality, its summer residence is extremely variable.

Summer resident.

AUDUBON'S WARBLER.

GENERAL DESCRIPTION:

Upper parts: soft bluish-gray, with yellow spot on head and rump.

Under parts: yellow and white, streaked with black.

Length, 5 to 6 inches.

Found in evergreen trees, even in those near houses in towns.

When a person is out the last of March, near a bunch of evergreens, or about willows bordering sloughs, he will hear a sweet, attractive song, and may soon see, moving about with the restlessness of its family, one of the most charming little birds on our coast, and one that belongs

wholly to it. Such a little bunch of beauty, seen for the first time, will send a thrill of joy through the beholder's heart. The colors in which he is arrayed are so bright and harmonious, and his song is so sweet and clear, one will ever afterward know him. His proper home, when nesting and all the season through, is in the spruce and pine; and when in these trees, you can only catch sight of him as he appears ever and anon on an outer branch and hangs for a moment searching with his sharp eyes for his insect food; or when, for a moment, he darts to a deciduous tree in the neighborhood, or to a lower dead limb on the evergreen.

The bird is very abundant, and the people of the Pacific coast should glory in this, which is perhaps, more than any other, characteristically their own beautiful Warbler.

PARTICULAR DESCRIPTION. — Head, back and wings, bluish-gray, with yellow spot upon crown and rump — the yellow spot upon the crown partly concealed; back, streaked with black; white patch upon wings; yellow throat; breast, white, streaked broadly with black, with striking yellow patches on the sides of the breast.

Summer resident, but it is probable that it occasionally spends the winter with us.

THE MYRTLE WARBLER.

There is a member of the Warbler family common in the East (but rarer here), which we might mistake for the Audubon's, should we some day happen upon him. It is the Myrtle Warbler, the distinguishing marks being that the latter has a white throat instead of a yellow one, blackish sides of the head, and not so much white on the wings.

Summer resident.

THE SKYLARK.

GENERAL DESCRIPTION:

Upper parts: light brownish, with slight tawny tinge.

Under parts: not different from upper.

Length, 7 to 7.5 inches.

Found in the open meadows.

The Skylark is an imported bird, to be sure, but is sufficiently numerous in some parts of Oregon to attract attention and minister to the joy of many people. No bird in the world has been so much the theme of poets, or so much the object of enthusiastic admiration. Its fame has gone out through all the world, and multitudes of people who have never seen the bird

have delighted in it in imagination. Nearly every one who has read poetry at all knows, more or less intimately, Shelley's, and perhaps Wordsworth's "Skylark"; and many can repeat at least a part of James Hogg's airy lines, beginning

"Bird of the wilderness,
Blithsome and cumberless."

Whoever in Oregon has seen this bird soar, and has heard him while soaring ever singing, can appreciate Shakespeare's unequalled lines,

"Hark, hark, the lark at Heaven's gate sings,"

and has felt that the poet has not overdone the fact. The bird is enchanting beyond the descriptive powers of poetry or prose. We must see and hear the Skylark for ourselves.

Behold a bird rising from the meadow, and the instant it is on the wing beginning a flood of exquisite song of rapid variation which does not cease, even for breathing, till, sometimes after fifteen or twenty minutes, it drops again to earth! Meanwhile, it is literally in the sky, and lost to sight if the eye should, even for an instant, surrender its object. No bird on our continent so nearly bursts with gladness. There

is one most thrilling utterance which ever and anon it returns to, seeming to say, "O joy! O joy! O joy!"

The location of the Skylark is not at present known beyond the fields in the eastern part of the city of Portland. But readers of this book will no doubt find it elsewhere, either now or at some time in the near future, as it multiplies rapidly and will extend its summer habitat.

The best time to see and hear it is in the morning or late afternoon, but it may be heard at longer intervals at all times of the day. It is a migrant here as in Europe, and leaves the fields where it has nested, in September, returning usually, so far as observed, about the second week in February.

PARTICULAR DESCRIPTION.— Brownish head and back, everywhere streaked slightly with black; breast, pale brownish or tawny-buff; outer tail-feathers, white.

Summer resident.

THE STREAKED HORNED LARK.

GENERAL DESCRIPTION:

Upper parts; tawny-cinnamon, streaked on back; tufts of black feathers over the eyes of the male, like horns.

Under parts: yellow.
Length, 6.25 to 7.25 inches.
Found in the open fields and upon windy prairies.

There are several varieties of this Lark; but one is peculiar to the western part of this section, and is called "Streaked" because of the strong markings upon the back. Another species of dusky hue, and unstreaked, but otherwise the same, is found west of the Cascade Mountains, and is called the "Dusky Horned Lark."

These birds, like other Larks, are characteristically lovers of the ground, where they run and sit, scarcely ever resting upon anything higher than a fence, and then only for a little time. On account of their running habit they are sometimes called on this coast, "Road Trotters." When they do occasionally rise higher it is, like the Skylark, to sing on the wing, and their efforts in this direction may not be despised. Their song is wild, glad and entertaining, though not loud or especially sweet, and they sometimes sing as near "Heaven's gate" as the Skylark himself. They, too, are "birds of the wilderness," and no storm or rain, however

severe, can drive them from the open field to cover.

PARTICULAR DESCRIPTION.—Adult Male: Fore-part of crown has black half-circle nearly from eye to eye, with tufts extending back like horns; a black patch under the eye; rest of crown, neck and rump, tawny-cinnamon; back, dull olive or grayish-brown, very much streaked with dusky; throat, pale yellow; black patch on the breast; abdomen, pale yellow.

Summer resident.

THE WHITE-CROWNED SPARROW.

GENERAL DESCRIPTION:

Head, with white line in center, with alternate black and white lines; back, yellowish-brown; breast, gray.

Length, 7 inches.

Found upon low trees and bushes in open places. Nests upon the ground.

Next to the Western Meadowlark, no doubt most people will vote the White-crowned Sparrow the most fascinating singer of our Northwestern States. He can be easily named, because of the central white or whitish line on his head, with alternate black and white lines on

either side of this distinguishing mark. In the Atlantic States the White-crowned Sparrow is very rare—is seldom seen and seldom heard. But in Oregon and Washington a species of this bird is on nearly every bush; and all the spring long, and most of the summer through, from early morning till night—and even in the night—can the exquisite notes of this gentle and friendly bird be heard. Often, through the darkest nights, in the Virginia creeper or honeysuckle around the porch or piazza, he utters his plaintive song—seeming to say, as one sensitive observer has imagined it: "Sweet, sweet, listen to me, won't you?"

This bird may be called "the American Nightingale," for surely its night-song has all the quiet melancholy that one's imagination would attribute to the notes of a bird in the hours of darkness.

There are two slightly different kinds of this Sparrow in our States.*

They are the Nuttall's and the Gambel's White-

*Since the publication of the first edition of this book, the American Ornithologists' Union, the authoritative body in this country in the naming of birds, has accepted Mr. Ridgway's change of the names of these two Sparrows. According to him, the Gambel's Sparrow of the first edition becomes the Nuttall's, and the Intermediate becomes the Gambel's.

crowned Sparrows. The former is the common one in Oregon, particularly in the Willamette Valley, and in southern Washington, as well. The Gambel's is rare in these parts, and may not be seen except during migration, but is found more frequently as we go north. On Puget Sound, at least in some places about Seattle and Tacoma, it is not uncommon. The summer habitat of the Gambel's Sparrow extends as far north as Alaska.

Most people in Oregon and Washington will take the Nuttall's Sparrow for granted, so rarely will the Gambel's be seen, but some interested students will want, during migration, to recognize both kinds; and people living around Puget Sound and in northern Washington should distinguish between these birds. Their appearance is so slightly unlike that one must look closely indeed to tell them apart. After hearing the songs of both, it seems to me that in this respect the birds may readily be distinguished. The usual Nuttall's song is the one interpreted above into "Sweet, sweet, listen to me, won't you?" The song of the Gambel's is nearly the same in quality and if it were the same in form, would

be identical. But it is irregular, without distinct articulation, and can be translated into no definite language. The differences in plumage may be gathered from the description of the two given in Ridgway's Manual. They seem to be these — the white, ashy or buffy median-stripe on the crown is, in the Gambel's, at least as broad, usually broader, than the other lateral stripes, while in the Nuttall's the same stripe is narrower than the other lateral stripes. Again, the back of the Nuttall's is a more smoky-brown than the back of the Gambel's, and the breast a darker gray. But the most decidedly definite distinguishing mark is this: the inner edge of the wing of the Nuttall's Sparrow is pale yellow, while the edge of the wing of the Gambel's is ashy. Both have light ashy or buffy lores, which join the superciliary stripe, instead of distinct black lores, as in the White-crowned Sparrow proper. The full particular description of the Nuttall's White-crowned Sparrow is as follows:

"Edge of wing, pale yellow; white, ashy or buffy median crown-stripe, usually narrower than black or brown lateral stripes; adult back with smoky brown or olive-brown, striped with dark sepia-brown or sooty blackish; and chest, brownish-gray." — *Ridgway*.

The White-crowned Sparrow of Oregon and Washington, as well as the Meadowlark, should be known and appreciated by every one.

A few White-crowned Sparrows spend the winter in these latitudes. Most of them pass the colder months in California. The return migration begins in late March or early April, and the songs are soon heard.

THE GOLDEN-CROWNED SPARROW.

GENERAL DESCRIPTION:

Upper parts: yellow crown, and olive-brown back.
Under parts: brownish-gray.
Length, 7 to 8 inches.

During the spring and autumn migrations, many persons will observe a sparrow, beautiful to the eye and, should the occasional song be heard, charming to the ear. The Golden-crowned Sparrow will stay with us a few days in April while on his way to Alaska to nest, and late in the season, when returning to his winter home in California. He resembles the White-crowned Sparrow, but his golden crown will be the only necessary mark of identification.

Transient.

Tame Robin and Fledgling.

(See page 258.)

THE CALIFORNIA PURPLE FINCH.

General Description:

Male: Head and breast, raspberry-red.

Length, 6 inches.

Found early in the season, in company with Goldfinches, feeding upon dandelion and other feathered seeds. Later, in orchards and gardens.

The Purple Finch is probably named, not from the color which we commonly recognize by that designation, but from a peculiar red shade which perhaps approaches in some birds the ancient Tyrian purple. The male, which takes all the color of the species, does not come to his rich heritage till he is two years old; meanwhile, closely resembling a Sparrow, he might be taken for one. The beauty of the male is not alone in the striking and unusual red upon head and breast, but is also in the fine and varied brown lines upon his back, and quite as much in his perfect form. The female is far inferior to her mate in respect of beauty.

This is one of the most beloved, and at the same time one of the most hated, of birds. For, while he comes to the bird-lover as an object of beauty to the eye with his display of fine color,

and a joy to the ear with his wealth of warbling song, to the fruit-grower he comes as an enemy of fruit buds. There is good reason to suppose, however, that the damage done by this bird is over-estimated; while it is possible that what seems to be harmful may be beneficial. Experiment has shown that finer and larger measure, or more weight of fruit, is obtained where a part (sometimes one-half) of the fruit set upon a tree has been removed. Mr. A. W. Anthony — one of the great authorities upon the birds of the Pacific coast — has given attention to this subject, has seen a partial experiment tried, and is of the latter opinion. One year the Purple Finches were allowed to have their own way in a cherry orchard, with the result that the cherry trees were overloaded at harvest time. But even if it is true that some damage is done by this bird and others, the farmer and fruit-grower must beware, for he may save a few cherries at the cost of immeasurably greater damage from insects and noxious weeds.

This Finch is with us in numbers by the last of March, and will soon after be heard pouring forth his beautiful song from the top of the

highest trees in the neighborhood. His song, in a general way, is a warble. Mr. Frank M. Chapman says of the song of the eastern Purple Finch (not unlike our own): "His song is a sweet, flowing warble, music as natural as the rippling of the mountain brook."

PARTICULAR DESCRIPTION.— Male: two years old, head, throat and breast, bright wine-red; back, brown, with a pinkish tinge; rump, more like head; abdomen, and under tail-coverts, white.

Female: Above, olive-grayish, somewhat streaked; breast, whitish, streaked with brown; abdomen, white.

Mostly a summer resident.

THE PINE SISKIN.

GENERAL DESCRIPTION:

Brindle-brown, with yellow bars on wings.

Length, 5 inches.

Found in the spring about our roadsides, and upon our evergreens, near and in open places, even in cities and towns.

As soon as the first dandelions are blown, and the green grass is flecked with their winged seeds, you will see flocks of little grayish-brown birds not unlike Sparrows in their color, but with

touches of light yellow on wings, back and tail, and sometimes a flush of yellow appearing under the surface of the feathers — eagerly devouring these fugitive morsels. They may be seen, too, upon the evergreen trees of the neighborhood, and again upon other trees, singing in chorus the softest, sweetest song imaginable. The privilege of hearing this song is not given to the people of the Atlantic coast, for before these birds there begin their song, they have gone north into the pines of British America, where they nest in the tree-tops, far from the marauding hands of man. These Siskins, sometimes called "Pine Finches," or "Pine Linnets," linger in this part of the country till the nesting-season for other birds has quite begun; and then, though some of them probably disappear to the mountains and possibly to the forests of the North, a good many, at least, have learned to trust their eggs and young to the neighboring trees.

The undulating flight of this bird should be marked as like that of the Goldfinch, to which it is related.

The Pine Siskin is mostly a transient.

THE WILLOW GOLDFINCH.

GENERAL DESCRIPTION:

Yellow body; black wings, tail and crown.
Length, 5 inches.

Found anywhere in open country, especially about weeds that have feathered seeds, and thistles.

This is the western species of the American Goldfinch and differs so slightly from that bird in appearance that eminent authorities have opposed noticing the distinctions and giving it another name. He is more generally noticed than most other birds in our locality, on account of his striking color. Resembling, as he does, the Canary, he is often called the "Wild Canary." But not many know more than the appearance of this bird of "gentle ways and sweet disposition." Few know his sweet song, like that of the Siskin (who is a cousin, as before intimated), and fewer know his undulating flight with the sweet accompanying song, which seems to rise and fall in pitch with his wave-like movement.

He begins to change his dress when the nesting-season is over, and in winter appears in darker and less noticeable garb—the male winter dress being somewhat like the summer dress of the female.

His home is where the thistle, dandelion, lettuce and sunflower bloom. Sunflowers in the garden will invite his presence and secure a long stay with you.

PARTICULAR DESCRIPTION. — Male: Head, back, breast and lower under parts, bright yellow; cap, wings and tail, black; white markings upon the latter two. In his winter dress the bright yellow changes to a brownish-olive; his black wings and tail retained.

Female: Both winter and summer, brownish-olive above; dusky-yellow below.

Partly a summer, and partly a permanent, resident.

THE ARKANSAS GOLDFINCH.

Length, 4.40 to 5.40 inches.

If we look closely, we shall discover that there is a difference in the Goldfinches, at least in some parts of our territory. Some of these soft and sweet singers will, on careful observation, be found to bear a distinguishing mark, as given in the description. The difference is in the appearance, and not so much in the habits, for these are very much, if not altogether, alike. The name indicates that they are found over

a wide area, and that the Pacific coast cannot claim them as it may the Willow Goldfinch.

DESCRIPTION. — Just like the Willow Goldfinch, except that the back and ear-coverts are plain olive-green, while the Willow Goldfinch is all lemon-color where there is no black or white.

Summer resident.

THE WRENS.

Perhaps no birds are more bewitching in their make-up and manner than these little creatures that are very common in certain wide parts of the North Pacific States. They are everywhere within these limits.

There are five varieties described here. The first three of these look, to the superficial observer, so much alike that care must be taken to distinguish them. They all have the same general form, and, in different shades, the same color, brown. The body and tail of each is barred or speckled with dusky cross-marks.

The other two are altogether unlike, and are so different from the three which so much resemble one another, that a person is not likely to make a mistake in their identification.

PARKMAN'S HOUSE WREN.

GENERAL DESCRIPTION:

Upper parts: darkish-brown.
Under parts: pale buffy.
Length, 5 inches and more.

Found about human dwellings and holes in fences and trees.

It is hoped that everyone knows "Little Jennie Wren," who in the spring is always looking for a sheltered nook about the piazza, in an out-building, or in a house built expressly for herself. What fidgety airs, what twitching and turning, what bobbing and bowing, what scolding, in their own peppery style, while you are near the sacred precincts of these little creatures! For, though angelic singers, they have a temper that even the larger birds fear. But what contrast in the bubbling song that the male will pour forth, at intervals, all day long,— sometimes allowing no rest, when singing in response to a rival. Mr. Chapman, says of the corresponding House Wren in the East, very nearly like our own, that he has heard one sing, under such conditions, ten songs a minute for two hours at a time.

If we do not have these little mountain brooks of song about our houses, it may be entirely our own fault in not setting up for them a box against the house, or even a box upon a pole,— in each case making the entrance not larger than a silver quarter, to keep out the English Sparrow or the Swallow.

PARTICULAR DESCRIPTION.— Male and female: All over, a little darker than cinnamon-brown; wings and tail, barred with dusky lines; "back and sides, more or less waved with dusky cross-markings"; under parts, pale buffy.

A summer resident. They may be expected from the South about the middle of April.

NORTHWESTERN VIGORS'S WREN.

GENERAL DESCRIPTION:

Very like the House Wren in general appearance, the distinguishing mark being a line of white over the eye.

Length, 5 inches and more.

Found in and out of thickets and hedges.

This Wren has the restless habit of the House Wren, as already indicated. It nests in thickets and hedges, and occasionally it, like the House Wren, makes a nest about a house. In March,

1901, a pair of these birds were nesting under the roof of a low piazza in Portland. The Vigors's Wren has one of the most striking and attractive songs given by the birds of the Northwest. His song is so unlike that of the House Wren that it cannot be confused with the latter, when once it has been distinctly heard.

PARTICULAR DESCRIPTION. — Above, almost a blackish-brown; wings and sides, not so dark; below, grayish-white; distinguishing mark, white line over eye.

Largely a permanent resident.

THE WESTERN WINTER WREN.

GENERAL DESCRIPTION:

Upper parts: darker brown than either of the other Wrens.

Under parts: pale brown; pale brown stripe over the eye.

Length, only 4 inches.

This is the smallest and the wildest of the Wrens. It lives in the woods about old stumps and the roots of overturned trees, where it nests. There he may be seen through the glass, with his short tail erect, hastening to get out of sight. But when you are no longer near, he begins an

exquisite song, which John Burroughs describes, in his eastern cousin, as "a wild, sweet, rhythmical cadence that holds you entranced." His note of alarm is said to sound something like "Chimp, chimp." You can tell him by noting carefully his short tail, and comparing your observation with the following description:

PARTICULAR DESCRIPTION. — Above, like other Wrens, more or less distinctly cross-barred, but darker and less rusty; chin and throat, dull tawny.

Permanent resident.

TULÉ WREN.

This is the western variety of the eastern Long-billed Marsh Wren. The long bill and the marsh habitat will distinguish it from all the other Wrens. This bird attaches its nest to reeds, making it globular in form, with the entrance on the side.

Mr. J. H. Bowles, of Tacoma, Wash., is my authority for saying that it is as common, about some parts of Puget Sound at least, as any of the members of the family named above.

PARTICULAR DESCRIPTION. — Head, dark brown; back, lighter brown, streaked with black and white in the

middle; "tail-coverts, upper and lower, usually distinctly barred with blackish."

Length, 5 inches.

Summer resident.

THE ROCK WREN.

Length, 6 inches.

This Wren is not uncommon in some parts of our territory in mountainous and sage-brush regions, but is not often seen, perhaps, in the most populous districts. In central-northern and eastern Washington and in southern-central and southeastern Oregon, ornithologists report numerous observations of the bird, and it is mentioned also as occasionally occurring on the coast.

PARTICULAR DESCRIPTION.—Like other Wrens in form and sprightly habit, differing mainly in being much lighter in shade, having above finely sprinkled dots of white and black, and a cinnamon-colored rump; a line of buff or white over the eye; lower parts, white, changing to light cinnamon in the abdomen.

Summer resident.

THE PACIFIC YELLOW-THROAT.

GENERAL DESCRIPTION:

Upper parts: olive-brown and olive-green.

Under parts: yellow. Black mask on forehead and sides of head.

Length, 4.75 to 5.85 inches.

Found in thickets on lowlands.

The Maryland Yellow-throat is famous in the East for his beauty and song, and has a large place in bird literature. The western variety of this bird, like the eastern, will in all probability be often heard before he is seen, for he loves the thicket from which, unseen, he may mock and delight you with his oft-repeated "Wichity-wichity-wichity." People interpret this song in many ways. Some say it is "Rapity-rapity," and others "Witch-e-wee-o," and so on. Mr. Burroughs says he has heard birds whose notes sounded like, "Which way, sir?" And Mr. Chapman says he has heard some who seemed to say, "Wait a minute."

The bird's coloring is striking. His yellow throat and jet black mask from bill to crown, and well down on the sides of the head, covering the eye, once seen, will never be mistaken or forgotten.

No one of the Warbler family has as many human devotees, and perhaps none deserves

them more. The Pacific Yellow-throat is not a whit behind his eastern counterpart in looks or in song; in fact, in the former respect, he has something of an advantage, his colors being brighter and richer, while he is also a little larger. His song has quite the same notes as that of the Maryland Yellow-throat. Dr. Henry van Dyke has paid him a beautiful tribute in a poem which reads something like an echo of the bird's fascinating song.

One of the verses is here introduced:

"While May bedecks the naked trees
With tassels and embroideries,
And many blue-eyed violets beam
Along the edges of the stream,
I hear a voice that seems to say,
Now near at hand, now far away,
'Witchery — witchery — witchery.'"

He comes to our latitude, from his winter home in the South, early in the season, and may be heard some years by the last week in March. He should be sought in lots where there are thick clumps of bushes, and in young growths of deciduous trees. His nest will be found upon or near the ground.

PARTICULAR DESCRIPTION. — Black mask, as above, bordered by a band (usually broad) of white; crown and

neck, olive-brown; back, clear olive-green; rump, more yellowish; throat and breast, bright yellow.

A summer resident.

THE WESTERN CHIPPING SPARROW.

GENERAL DESCRIPTION:

Upper parts: crown, rufous; back, slightly reddish-brown.

Under parts: light soft gray.

Length, 5 inches and more.

Found in open fields, often near houses.

This little Sparrow is the smallest of its family. It has its own peculiarly quiet and fascinating manners and habits. It has some of the domestic proclivities of the corresponding eastern variety. The latter is found about back-door yards and even upon door-steps, looking for crumbs, and no bird has a more winsome look or dainty habit. He should never be mistaken for the English or House Sparrow, which greedily takes all crumbs meant for others. The "Chippy," as he is more familiarly called, may be heard uttering his characteristic song or call, "Chip, chip, chip, chip, chip," often and rapidly repeated. It sounds, sometimes, like a mellow chirring of a grasshopper. Occasionally, in the

darkest night, the song of the male bird will ring out in the still air, in order, it is said, to re-assure the little female upon her nest. This Sparrow is sometimes called the "Hair Bird," because he lines his nest with horsehair.

PARTICULAR DESCRIPTION.— Crown, bright reddish-brown; forehead, black; streak of gray over the eye; back, brown, slightly reddish, feathers streaked with black; breast, and abdomen, soft, light gray.

Quite a common summer resident. A few of the birds remain all winter.

THE OREGON VESPER SPARROW, OR OREGON BAY-WINGED BUNTING.

GENERAL DESCRIPTION:

Upper parts: brown, streaked with gray.

Under parts: whitish, streaked; outer tail-feathers, white.

Length, 6 inches.

Found in open pasture lands and by country waysides.

While you are looking for and watching the Sparrows already named, you will see a Sparrow fly out of the road, or along the fence, showing white outer tail-feathers — the one infallible mark by which you may know a Vesper Sparrow from

other members of his family; notice also the bay or chestnut-colored lesser wing-coverts. Only do not mistake the Junco, or "Snow Bird," for the Vesper Sparrow, as he has the same white tail-markings. This Sparrow is common in the western parts of our States, is a sweet singer, uttering a freer note than the Song Sparrow, and is more generous of his song. The song is difficult to describe, but cannot be mistaken after it has once been recognized. The bird has received the distinguishing name of Vesper Sparrow because, perhaps, it sings more toward evening than do the other Sparrows.

PARTICULAR DESCRIPTION.—Male and female: Head and back, brown, streaked with gray; shoulders, chestnut; throat and breast, whitish, striped with dark brown; lower under parts, soiled white; outer tail-feathers, partly white, apparently wholly white as the bird flies.

Summer resident. Arrives about April 15th.

THE WESTERN SAVANNA SPARROW.

GENERAL DESCRIPTION:

Upper parts: pale grayish, brown streaked.

Under parts: whitish, streaked with brown; yellow line over eye.

Length, 5.5 inches.

Found by seaside, and in and around marshes.

This western variety of the Savanna Sparrow of the East is common along the coast and on Puget Sound, and should be recognized by those in whose locality he is a resident. Its song is low and grasshopper-like: "Ptsip, ptsip, ptsip; zee, e-e-e-e." Its home, in the marshes and low-lands, where other Sparrows are not usually found, gives this bird an association of special interest.

It nests upon the ground in grassy places, or in the sedge of the marsh.

PARTICULAR DESCRIPTION. — Head, back and wings, pale grayish-brown; light gray line down middle of head; line over eye, yellow; back, streaked with broad black and narrower light grayish lines, strongly marked; abdomen, whitish, streaked with buffy.

Summer resident.

THE WESTERN LARK SPARROW.

Length, 7 inches.

This Sparrow, is a striking bird in color, size and song. On account of his peculiarly striped head, it is called, in some localities, the "Snake Bird." It is to be regretted that, because of its fine song, it is often caged.

The Agricultural Department of Washington, D. C., reports that only two species of the numerous Sparrow family equal this one in the destruction of grasshoppers; it also eats the wheat weevil and consumes weed-seeds without limit.

It is reported as abundant in southern Oregon, and is common in Chelan and Okanogan counties in Washington and in other localities in our States.

PARTICULAR DESCRIPTION. — "Crown and sides of head, chestnut, with line of grayish-white on top of head; body, above, light grayish-brown, narrowly streaked with blackish-brown; a narrow line of black on each side of throat, and a small, irregular black patch on the breast, otherwise, under parts, white." — (*Keeler.*)

Summer resident.

THE SWALLOWS.

These are the birds that do not sing, but they fly with a grace that fascinates one and compels prolonged attention. The flight of any bird is wonderful, and should never be overlooked as a source of satisfaction to the heart of a bird-lover. But the flight of the Swallow has in it all of the

grace and poetry of motion imaginable. Flying is marvellous enough; but floating in air seems fairly miraculous to one who, for the first time, really notices a Swallow glide over a meadow or touch the bosom of a lake, and for a distance make no motion of the wings — except as they go with the body in its easy turns. The Swallow is truly the bird of the air, as the Sparrow is the bird of the ground, and the Warbler, the bird of the trees.

Swallows eat and drink while on the wing. One kind occasionally eats at rest. No one ever saw a swallow chasing insects upon the sand, and not one, perhaps, was ever seen lifting his head toward heaven after dipping his bill into a pool in the road or in a spring. He alights only for rest and for sleep. Nearly all the day, from sun to sun, he darts and gyrates and glides over meadow and pool — taking what he needs while in ever graceful motion.

It is said that Swallows do not sing. Do they not? Is not their exquisite twitter a song? that twitter that is so friendly to each other and so charming to man, that it gives the satisfaction of a song.

These birds are so peaceable among themselves, so fond of living together, that we are attached to them. Some of them make their nests in colonies, and are not jealous of room or of favorable locations.

As much as the author of this book is pleased with the "birds that sing," he wishes to record that the Swallows have ministered to his happiness not less.

He sympathizes with Jeffries, who says: "As well suppose the trees without leaves as the summer air without swallows. Ever since, of old time, the Greeks went round from house to house in spring, singing the swallow song, these birds have been looked upon as the friends of man, and almost as the very givers of the sunshine. . . . The beautiful swallows, be tender with them, for they symbol all that is best in nature and all that is best in our hearts."

There are six varieties of the Swallow proper more or less common in Oregon and Washington. They are the Violet-green, Cliff or Eave, White-bellied or Tree, Bank, Rough-winged, and Barn Swallows — besides the Martin, which will be described also.

THE VIOLET-GREEN SWALLOW.

General Description:

Upper parts: a soft rich green (but not lustrous).
Under parts: pure white.
Length, 5 inches.

Found about houses and out-buildings.

This bird belongs to the Pacific coast; and a particularly beautiful bird it is, having a beauty as rare as the peculiarity of its color. To enjoy this, one needs, in just the right light, to catch sight of the sheen of the plumage in a slanting vision; for the beauty of the plumage of this bird is, like many of the finest things in the world, not striking, but exquisitely delicate. The glossy bluish-black of other Swallows will easily command your admiration, but this bird is by far the most beautiful.

This delightful creature is perfectly domestic, choosing his nesting-place in and about human dwellings. He still, however, to some extent, rears his family in holes of trees in the woods,—his constant habit before human habitations became numerous. He welcomes a bird-house, while he will enter through a knot-hole, or any opening in cornice or gable, to find a secure

home for his young. Mr. Ross Nicholas, of Portland, Oregon, reports an example of the tireless labor that these birds will put forth in the construction of a nest. A pair having discovered a way into the eaves of a house, found a space of three feet below the opening, and, with a courage and patience that ought to be the envy of man, proceeded to build up the nest, straw by straw, until it stood level with the entrance.

I have said that Swallows do not sing, but this bird's note is more than a twitter — more like a soft song.

The Violet-green Swallow should never be confused with the Eave Swallow and driven away, lest mud nests be built against the sides of the house. A distinguishing mark between the two birds is the seemingly white rump, when the "Violet-green" is on the wing. This appearance is caused by the white from underneath extending so far around the sides of the rump; the latter is, in reality, a mingled color — bluish-green with rich plum-purple.

PARTICULAR DESCRIPTION. — Effect of all above, a soft rich green, but head and neck and sometimes back, shaded with purple to a violet-green tint in center of

rump; white patches on sides of rump often give effect of continuous white when the bird is on the wing. All below, pure white. Mr. Charles A. Keeler thus describes this Swallow: "Above, a soft, rich green, changing to a purplish-brown on the crown, and to violet-purplish on the upper tail-coverts." By "tail-coverts" is meant the feathers above and below, which lap over the tail from the body.

Only a summer resident, spending the winter with the other Swallows in the tropics. Due in the locality of the Columbia River about April 1st, sometimes a week earlier.

THE CLIFF, OR EAVE, SWALLOW.

General Description:

Upper parts: bluish-black.
Under parts: brown and white.
Length, 6 inches.

Formerly, like all the large Swallow family, the Cliff or Eave Swallows lived far from human dwellings. But they are now, like so many of their kind, found about buildings, although they still, to a considerable extent, make their curious nests upon the sides of cliffs. These mud nests are pocket-shaped, and are literally glued to per-

pendicular surfaces. The birds sometimes add mud house to mud house until their homes can be counted by hundreds on the side of a cliff. These Swallows become much attached to one locality, and, if allowed, will return to it year after year.

They are beautiful, gentle and winsome; and if one really learns to love them, he will not begrudge them a place on the side of the barn, or even, sometimes, upon the side of the house.

To one who has eyes, the marvelous houses built by these feathered architects will be more artistic than certain "ginger-bread" work that we so often see around cornices.

Between the Eave and the Violet-green Swallows we may never lack for entertainment and objects of loving interest around our homes in the summer months.

PARTICULAR DESCRIPTION. — Male and Female: Whitish forehead; crown and back, steel lustrous blue; rump, rusty or buffy; throat, chestnut, with blackish area; breast, light brown; lower under parts, white.

Summer resident. An early arrival. A few come in March, and the body in early April.

THE WHITE-BELLIED, OR TREE, SWALLOW.

GENERAL DESCRIPTION:

Upper parts: dark steel-blue.
Under parts: pure white.
Length, 6 inches.

Found about hollow trees in the woods, and particularly in trees about sloughs.

This is the first Swallow to appear in the spring, and may be seen in scattering numbers early in March, and arrives in this latitude in abundance before April 1st. In the East, he, too, comes and asks to share man's home with him, welcoming, as the Violet-green Swallow does here, a bird-house or an opening in the gable or eaves.

Like his cousins, his former home was entirely in the wilds, and, as his name indicates, in the trees of the forest. But here, as in the East, we may at some time expect him often to prefer to share our home, and let us in turn share his beauty of appearance and movement, and also his delight in life, so manifest by a constant warbling-twitter while performing his bewildering, tireless evolutions on the wing.

This member of the family is not nearly so numerous on this coast as the Violet-green or the Cliff Swallow; but it is common enough about our sloughs to be easily identified.

No detailed description of the bird is possible or needed, as it has just the two colors given in the "General Description." Indeed, its scientific name has in it the word "bi-color." The female is a little duller in color than the male.

Like other Swallows, it is found, when nesting, near its home; but before and after, it covers the open country in its rapid flight, searching for insects.

A summer resident. The first of the Swallows to appear and the last to disappear in northern latitudes in the East. Here, it is reported to be the first to leave.

Sometimes when insect food is scarce, this bird eats bayberries; but it is the only Swallow that ever eats anything but insects.

This is the only one of the family, too, that spends the winter in the United States — the others wintering in South America.

THE BARN SWALLOW.

GENERAL DESCRIPTION:

Upper parts: glittering steel-blue.

Under parts: chestnut-brown, with tail deeply forked.

Length, 7 inches.

Found around barns and out-buildings, while nesting; and far afield while feeding, and after breeding is over.

It is to be regretted that the Barn Swallow is not more generally distributed throughout the North Pacific States. It is expected that it will become a more frequent and familiar resident about our farms and in our villages, if we give it tokens of hospitable welcome, such as offering entrance to our barns through an open window or through a hole in the gable.

Even now it is very abundant in certain localities, especially upon the coast in Tillamook County, Oregon, and about Cape Disappointment, Washington.

Probably no bird is more associated with the country boy's life, in the East, than this arrow-like but tame bird, that glides in and out of barn doors and windows, ministering to the wants of the brood of little ones in the mud nests stuck

to the beams or rafters overhead, where can be heard all day the soft purr and sweet chatter of old and young in their peaceful domestic life.

All Swallows are miracles upon the wing; but no other of the family has the equipment for speed and sudden turn that this one has — the forked tail and a little stronger wing furnishing him with the power for this excellence.

In coloring, this Swallow need not be ashamed, for, in addition to the rich, lustrous blue of its back, its chestnut breast glistens in the sun like a polished surface.

Though the Swallows on the beams and rafters do soil somewhat our barns and sheds, is not the pleasure they give in their sweet fellowship of home-making, and in their ministry of beauty, ample reward?

PARTICULAR DESCRIPTION.— Male: Forehead, rufous; head and back, glistening steel-blue, shading to black; throat, rufous; breast and under parts, brilliant buff that glistens in the sun; an irregular collar of bluish-black; tail, very deeply forked, with long, slender outer tail-feathers.

Summer resident.

THE BANK SWALLOW.

GENERAL DESCRIPTION:

Upper parts: brownish-gray, no metallic coloring.

Under parts: white.

Length, 5 inches.

Found around river banks, and, like other Swallows, wide rovers over field and marsh.

This is the smallest of the Swallows, and, like the Cliff Swallow, it nests in colonies, choosing for settlement, as a rule, sandy river banks, in which with its little bill and small feet it bores holes two or three feet deep — a thing seemingly impossible to do with such tiny implements. The holes are only far enough apart to avoid coincidence, and at the end of each is the nest, lined with grasses and rootlets.

These large communities of feathered neighbors dwell most happily together, and habitually leave their homes with a "giggling twitter" — one of the cheeriest notes along the river banks. The homes are of frequent occurrence along the Willamette and elsewhere in these States.

PARTICULAR DESCRIPTION.— Male and female: Head, back and tail, grayish-brown or clay-color; upper wings and tail, darkest; breast, white with brownish band across; abdomen, white; tail, though rounded, more nearly square than that of other Swallows, and obscurely edged with white; a little tuft of feathers at the base of the toes.

Summer resident.

THE ROUGH-WINGED SWALLOW.

GENERAL DESCRIPTION:

Not unlike the Bank Swallow.

Length, 5.5 inches.

Found in the same localities as Bank Swallows, and as other Swallows when on the wing.

This is really another sort of Bank Swallow, nesting, as it does, in holes in river banks.

Its habits are quite identical with those of the Bank Swallow. It is chiefly distinguished by the peculiarity which gives it its name, viz.: the outer edge of the first flight-feather has a series of stiff hooks upon it. Its breast is also a little grayish but without the band.

A summer resident. Arrives and departs with the Bank Swallow.

THE WESTERN MARTIN.

GENERAL DESCRIPTION:

Male: Glossy purplish-black above and below.

Female: Bluish-black, less clear above; whitish below.

Length, 8 inches.

Found about houses and hollow trees.

This is one of the family of Swallows, and yet is so individual in nearly all ways that we must regard the bird a little apart from his relatives. He is much larger than any of the Swallows (the length of the Barn Swallow's outer tail-feathers must not be taken into account). The color of the male, strikingly beautiful, is altogether unlike that of any other Swallow. Then its flight is higher, less swift, less free and extensive. It alone of all its kindred has a full rich voice, which all day long, while the bird is on the wing or at rest, may be heard like "musical laughter rippling up from the throat."

The eastern variety, almost exactly like the western, has from time unknown preferred the home made for it by man — the Indian, before the white race appeared, having placed a hollowed gourd lined with bark in the crotch of his tent poles, to invite the Martin's friendship.

But in the East no bird has suffered so much from the English Sparrow as the Purple Martin, through the pre-emption by the Sparrows of the houses intended for their betters.

It is to be regretted that the Purple Martin is not more numerous and more generally distributed in this section of the country. But they are quite numerous in special localities and already are preferring to nest about houses rather than in the hollow trees. They were seen and heard by the writer at St. Helens, on the Columbia River, in May, 1899, and in the spring of 1901 were found nesting in and about the city of Tacoma.

If we keep several bird-houses on our premises, we may succeed in bringing a pair of these delight-giving creatures to pass each spring and summer with us; for, once hospitably entertained, they will return as regularly as the seasons.

PARTICULAR DESCRIPTION. — Male: Rich glossy black, with bluish and purple tints; duller black on the wings and tail; wings rather longer than tail, which is forked.

Female: As above.

Only a summer resident. Arrives in mid-April.

THE CEDAR WAXWING ("Cherry Bird").

GENERAL DESCRIPTION:

A crested bird. General color, grayish-brown, tinged with plum color. Very neat appearance and quiet manner when perching.

Length, 7 inches.

Found all over settled parts of the country in small flocks, except in nesting-season in June.

Combined exquisiteness of dress, gentleness of disposition, politeness of manners, almost lisping song and whispered conversation, distinguish the Cedar Waxwing from all other birds. The Bluebird has been previously described as gentlemanly or ladylike, and so it is, in looks and general manner. But the Waxwing outranks it in these respects and in the others named.

With regard to his dress, some might call the bird a "dandy," so exquisitely neat and perfect is he. But a second thought will cause us to regard his attire rather as a work of fine art; the perfect crest, the vinaceous tint in the predominating soft, gray-brown plumage, the velvety black line across the eye and around the fore-

Boy and Cedar Waxwing.

(See page 256.)

head, the dainty red waxlike spots upon the wings, as if each one had been placed there from without by the divine Master Artist Himself, the finished yellow edge upon the tail, all together give an impression of perfect quiet beauty that is unique in our experience of birds.

As to manners, Nuttall describes their politeness to each other as they go about in flocks. He says he has often seen them passing a worm along the line from one to another and back again before it was finally eaten.

Their song is a lisping "Twee-twee-ze." Their communications while in social tête-à-tête upon a tree are, as suggested, in a whisper evidently intended only for each other's ears.

Owing to their food habits they are, like Robins, rovers when not nesting. They must find cedarberries, canker-worms, wild or cultivated fruit; and they fare forth for these with a range even wider than the Swallow's, as nightfall does not call them back to any fixed roosting-place.

The bird's fondness for cherries arouses the hostility of some men. But again we ask, is it right to destroy such a perfect "thing of beauty"

and such an enemy of the deadliest foe of shade and fruit trees — the canker-worm — because the bird does sometimes take a share of the fruit that it helps to raise?

PARTICULAR DESCRIPTION. — Male: Above, grayish-brown, varying with plum-colored tints to ashy; black forehead; chin, black; breast, lighter than back; abdomen, yellowish; under tail-coverts, white; yellow tips on tail.

Female: Duller plumage, smaller crest and narrower yellow band on tail.

Mostly a summer resident.

THE WARBLERS.

Two of this family, the Audubon's Warbler and the Pacific Yellow-throat, have already been described, because they come so early to our latitude, and so certain are they to be the first to attract attention. There are others of this family which we must recognize, some of which are very abundant though arriving later in our neighborhoods.

No one can tell just why the Warblers are called Warblers; they do not many of them (and they are a large family) warble in song more

than other birds, while some do not warble at all. But they are alike in their habits. They are the birds of the trees and the leaves. They live among the leaves and feed upon the insects which they gather from them. Sometimes, too, some of them take an insect on the wing as do the Flycatchers.

Except when upon a nest, or at night, they are ever in motion, searching leaf after leaf for their food.

They are all small birds, all of them well dressed, many of them exquisitely plumaged. Besides the two mentioned, the following are more or less common in Oregon and Washington, and may be quite easily identified. The Yellow, Lutescent, Macgillivray's, Black-throated Gray and Pileolated Warblers; also the Long-tailed Chat.

THE YELLOW, OR SUMMER, WARBLER.

General Description:

Upper parts: yellow and olive-green.
Under parts: light yellow.
Length, 4.75 to 5.2 inches.

Found in shade-trees, orchards and edges of woods.

This beautiful little bit of animated sunshine makes glad the summer days everywhere through temperate North America, from ocean to ocean, except where there are no deciduous trees. It may be before the foliage is well developed that he will arrive from the tropics of the Southern Continent. He is our most common Warbler, whose rather metallic and oft-repeated "Wee-chee, chee, cher-wee" may be heard from nearly every shade-tree in our cities, as well as along the country roads and in the orchards.

As abundant as he is, you may not at once espy this persistent singer, as he loves the obscurity of the thick leaves.

No one should mistake him for the Goldfinch or "Wild Canary," as is sometimes done, for this bird has no black upon him, and his habits and flight are entirely different.

PARTICULAR DESCRIPTION. — Male: Brighter yellow on head and neck; back, tinged with olive-green; wings and tail, dusky olive-brown; breast and abdomen, bright yellow, streaked with brown.

Female: Like male, only duller and no streaks below.

Summer resident.

THE LUTESCENT WARBLER.

General Description:

Upper parts: light olive-green.

Under parts: bright greenish-yellow.

Length, 5 inches.

Found in trees of thick foliage.

While listening to and searching for the Yellow Warbler, we shall hear another and oft-repeated song in the same trees; and if we are not careful, when we see its author, we shall confuse it with the female of the Yellow Warbler. It is of nearly the same size as that bird, — a little smaller. It is yellow, too, but of a darker olive-greenish tint throughout, and his song is not to be mistaken, once it is recognized. The bird hides more persistently in the foliage than the Yellow Warbler, and will be more difficult to catch under the opera-glass. But he may be found visiting the leaves of apple or other fruit trees, for fare for himself and young, and may then be particularly observed. Arrives in first part of April.

Particular Description. — As in general description, also an "obscure crown-patch of orange-brown." (Keeler.)

Female: Duller color.

Summer resident.

MACGILLIVRAY'S WARBLER.

GENERAL DESCRIPTION:

Head, dark gray; back, olive-green; black spot between eye and bill.

Length, 5.75 inches.

Found in bushes and thick low growth.

When looking for other birds some day, you will find one that will strike your attention immediately because of the black spot referred to in the general description. This will at once identify him, and he will seem to you, probably, less restless than the other warblers you have found. You may, at your leisure, learn his song and habits

PARTICULAR DESCRIPTION. — As in general description, also throat and upper part of breast, dark gray; below this, bright yellow.

Summer resident.

BLACK-THROATED GRAY WARBLER.

GENERAL DESCRIPTION:

Black throat; black, white and gray all over, except yellow spot in front of eye.

Length, 4.7 to 5.4 inches.

Found in evergreen tree-tops.

Some time, when you are under the evergreens, you will notice some little restless crea-

tures, mostly high up in the spiny limbs. Your glass will bring them to your recognition as the Black-throated Gray Warblers. This variety of Warbler lives, feeds, and nests in those high places over your head. This strange and far-away habit will at the same time interest and tease you, so beyond convenient range does it take these tiny birds. Hard enough would it be to see them well, were their restless bodies nearer the earth. But are we not always more curious about the creatures that are not near?

PARTICULAR DESCRIPTION.— Head, black; yellow spot in front of eye; back, bluish-gray streaked with black; throat, black; breast and under parts, white; sides, streaked with black.

Female: Colors duller, and throat mixed somewhat with white.

Summer resident.

THE LONG-TAILED CHAT.

GENERAL DESCRIPTION:

All above, olive-gray; long tail; breast, bright yellow; under parts, white; bill, rather long, and upper mandible, curved.

Length, 7.5 inches.

Found, usually, in and about thickets around swamps and streams.

Some day this strange bird will reveal himself to you, not alone in his wild, varied and chattering song, but in his really funny antics upon the wing. He is, of all the birds that we shall know, "the funny bird." He sings a rollicking, imitative and frolicsome song, running through how many keys and forms, only those know who have heard him. Some have tried to write down the medley of the Yellow-breasted Chat of the East, which is very like our own in song and habits. Mr. Burroughs has expressed it thus: "Now he barks like a puppy, then quacks like a duck, then rattles like a kingfisher, then squalls like a fox, then caws like a crow, then mews like a cat . . . C-r-r-r-r-r-whrr — that's it — chee — quack, cluck, yit-yit-yit — now hit it — tr-r-r — when — caw — caw — cut, cut — tea-boy, — who, who — mew, mew."

His actions befit his song; often upon the wing, a little way above the thicket, he will tumble in air, dropping his legs, flapping his wings, and all the time chattering his rollicking song.

When you see him in the bushes, his manner is that of "a mischief." He looks as if he

might, if he could trust himself to do it, tickle your ear or play hide-the-handkerchief with you.

Our funny bird cannot be satisfied with the day to sing in. Many times in the night, and particularly upon moonlight nights, you may hear his good spirits bubbling over in his varied song.

Though the Chat is classed with the Warblers, one can hardly think of him as belonging to this family.

PARTICULAR DESCRIPTION. — Male: As in general description; also two white lines on face, one above the eye, one below; eyelids, white; lores (spot between eye and bill), black; under tail-coverts, white.

Female: Duller colors.

Summer resident.

THE PILEOLATED WARBLER.

GENERAL DESCRIPTION:

Upper parts: black cap and bright olive-green back.

Under parts: bright yellow.

Length, 5 inches.

Found in swampy woods.

This Warbler is the western variety of the eastern Wilson, or Black-capped Warbler, and

will not be found in Oregon, or in southern Washington, perhaps, except in migration. But in northern Washington, about Puget Sound, he is not rare, nesting in these parts.

PARTICULAR DESCRIPTION. — Forehead, bright yellow, in males; center of crown, black; back, bright olive-green; under parts, bright yellow.

Summer resident.

THE BULLOCK'S ORIOLE.

GENERAL DESCRIPTION:

Male: Black head and back; large white wing-patch; rest of body, bright orange-yellow and orange-red.

Length, 8 inches.

Found in willow, elm and other shade-trees.

Bird-lore is full of references to the Oriole. Because of their bright colors, their attractive song and unique nests, these birds have always commanded more or less appreciation, even from those who seldom notice birds in general.

The East has the advantage of us in respect to Orioles, as it has in respect to Tanagers. The Baltimore Oriole, the "Golden Robin" or

"Hangbird," has wide fame, and its more modest relative, the Orchard Oriole, is beloved of all who know his song. Rare specimens of the Bullock's Oriole equal, perhaps, the Baltimore Oriole in glory of color; but in song the bird is always inferior to its eastern cousin. The Bullock's Oriole is found as far east as Kansas.

The eastern Oriole's song is a rich whistle, while our western bird utters a music so strangely remote from anything Oriole-like, that one would never guess that it came from his throat unless he caught him in the act — as I did, after three weeks' guessing what new and strange bird in the high shade-trees sang, not too generously, his "Keu, keu-a-keu, keu, keu." The beauty of color, however, is great enough to excite our admiration; and its song is sufficiently sweet to delight our ear; while its nest, hung like a flexible basket, or even like a deep, round satchel, from the swaying limb of some tree, never fails to bring out the exclamation, "What man could do that!"

This bird sings and nests high, and some day a song in the tree-tops will please, and at the same time puzzle, unless you can see the west-

ern "Golden Robin" which utters it. But a careful observation will reveal the singer and his curious nest.

PARTICULAR DESCRIPTION. — Male: Head, upper part of back and narrow throat-patch, black; tail, black and yellow; a large white wing-patch; rest of body, orange-yellow to orange-red.

Summer resident.

THE VIREOS.

There is a numerous family in America of little olivaceous-backed birds, that keep a sharp eye for insects upon the outer surface of the foliage of the trees. They are nearly all sweet, cheery and persistent singers. Their nests are, with those of the Bush-Tit and the Oriole, pendant, pocket-like affairs, and the nests of the different varieties of Vireos are so much alike that we may not hope to tell "which is which," unless we catch the birds upon, or near by, these most interesting homes.

Our two States seem to have only two of the family which are common, Cassin's and the Warbling Vireo. There is one other here, less

common, known as Hutton's, and another very rare, bearing the name of Mr. A. W. Anthony — Anthony's Vireo.

THE WARBLING VIREO.

GENERAL DESCRIPTION:

Upper parts: clear grayish-olive.

Under parts: whitish. The sides are yellowish.

Length, 5 to 5.55 inches.

Found in tops of shade-trees in town, soon after arrival. Then they disappear for nesting, and return later.

This member of the Vireo family is distributed over nearly the whole of North America. I have heard him sing in New England, in the southern Middle States and in Minnesota. And here again "His continuous flowing warble with an alto undertone" (Chapman), may be heard late in May in the thick foliage of our shade-trees; but he may not easily be seen, even with a glass. His song will be heard there morning and afternoon, though not toward evening. It is said by some to resemble that of the Purple Finch. He sings while in constant motion, seeking his food.

PARTICULAR DESCRIPTION. — Head, brownish-gray; a faint whitish line over eye; back, clear olive-gray; wings, greenish-olive; breast, dull white; pale yellowish sides.

Summer resident.

CASSIN'S VIREO.

GENERAL DESCRIPTION:

Upper parts: bluish head and grayish-olive back.

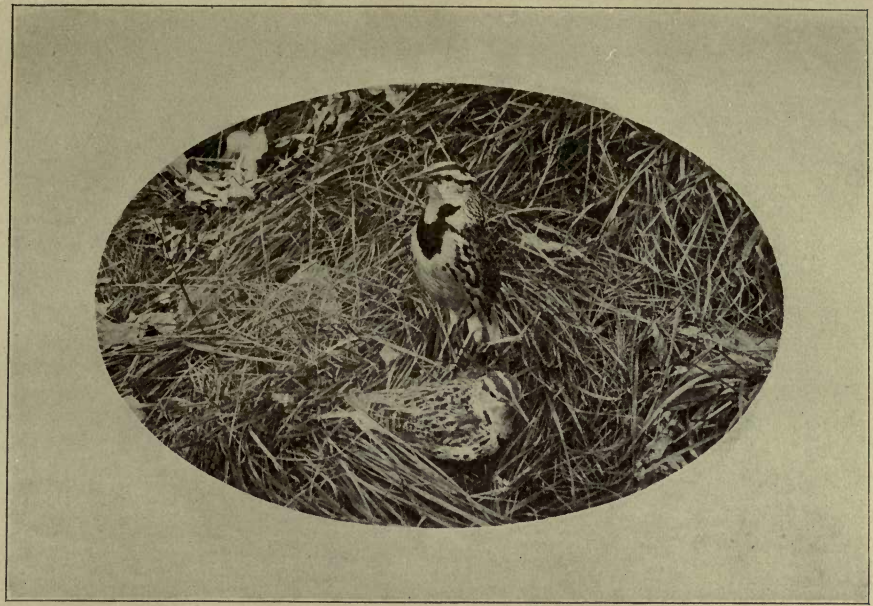
Under parts: dull white with yellowish sides.

Length, 5 to 5.6 inches.

Found in partly open country, in deciduous trees of rather low growth.

Cassin's Vireo is another bird that belongs chiefly to the Pacific coast. It is, like the birds of other families already named belonging to the western part of the continent, a bird to rejoice in. His song is characteristically vireoish — a kind of warble with a touch of the metallic in it.

He may be distinguished from the warbling Vireo by his lower perch, by his less flowing song, and also by his markings, which are altogether his own.



A Pair of Western Meadowlarks.

(See foot-note, page 12.)

PARTICULAR DESCRIPTION.— As above, bluish head; a conspicuous white line about his eye, and two white wing-bars.

Summer resident.

THE BLACK-HEADED GROSBEAK.

GENERAL DESCRIPTION:

Male: Upper parts: head and back, black; neck, orange-buffy; wings and tail, with white patches.

Under parts: orange-brown and yellow.

Length, 8 inches.

May often be seen singing upon the taller trees left standing in the midst of younger growth. It nests in low growth, sometimes near water.

Some say that the most beautiful singer amongst the birds of the eastern States is the Rose-breasted Grosbeak. A member of the same family, belonging exclusively to the western part of the continent, holds something like a corresponding position in this section. Though it is less varied, his song has the same general quality as that of the Rose-breasted Grosbeak. The song is not unlike that of the Robin in its

general form; but there is a mellowness about it, and running through it "a rich undertone," as a competent judge describes it, which should charm every listener. When the writer first came to this coast, he mistook, for an instant, the song of the local bird for that of the Rose-breasted Grosbeak, owing to this mellow undertone.

The male bird's color is notable for its richness, being made up of alternate large patches of black and orange or red-buff. The form and carriage of the male is both attractive and commanding. His body looks graceful and longer than it really is, as he sits upon his perch, singing his love-song, like a master-bird as well as a master-musician.

PARTICULAR DESCRIPTION. — Male: Head, black, sometimes a line of light orange-brown in center of crown and back of eye; collar, back of neck, cinnamon-color; back, black mixed with light cinnamon, sometimes all black; rump, cinnamon; wings and tail, black, varied with white; breast, cinnamon; abdomen, yellow, also inside of wings.

Female: Olive-brown, instead of black; under parts, whitish, streaked on sides; lining of wings, lemon-color.

Summer resident.

THE RUSSET-BACKED THRUSH.

GENERAL DESCRIPTION:

Upper parts: from russet to olive-brown.
Under parts: light gray.
Length, 7 inches.

Found in young deciduous growth, and amongst the trees and shrubs of large places in towns and cities.

The Thrushes (those known specifically by that name) are not so many in variety in Oregon and Washington as in the East. The Russet-backed Thrush, however, like some other varieties of birds already mentioned, belongs exclusively to this side of the American continent. It is a beautiful singer, as befits the family, and is very abundant.

It is the Pacific coast variety of the Olive-backed Thrush of the East, which it closely resembles in size and appearance, the breast in the two being almost identical. Its call-note and song are also very similar to those of the eastern bird, but it is like the Wood Thrush in its familiar way of approaching human dwellings and nesting upon grounds even within our cities. It arrives late, about the last of May. But once here, its call-note, a short whistle, a sound pearl-like for liquid roundness, may be heard from the

lower limbs of town trees; and some days later, towards sunset, and long after, you will hear the Thrush-songs from many quarters.

This bird sings at other times to be sure — as in the early morning with the other birds — but its song is mostly at night, and even into the night; sometimes when darkness has almost entirely settled down, the sweet and yet loud notes of this Thrush may be occasionally heard. As a singer it ranks amongst our half-dozen best, and its arrival should be eagerly watched for, and its song enjoyed for the five or six weeks that it lasts.

In some parts of Oregon and Washington, some may hear the even sweeter notes of the rare Dwarf Hermit Thrush; but most people will not have the privilege of hearing the song of any other member of this family beside that of the Russet-backed Thrush.

PARTICULAR DESCRIPTION.—Head, back, wings and tail, sometimes more russet, sometimes more olive-brown; a whitish ring encircles the eye; sides, olive-gray; breast, pale buff and marked with small, triangular brown spots; abdomen, white.

Summer resident

Some reference to the probable presence of a few of one or two species of imported Thrushes in certain parts of Oregon, will be made in another place.

THE FLYCATCHERS.

This is a peculiar and strongly marked family, the different members of which resemble each other sufficiently to seem almost to be brothers and sisters from the same nest, varying in size and other ways only as much as brothers and sisters do in other than bird-families. They not only look alike, but they act so much alike that you may know, in a general way, the whole family by seeing one member of it.

Their name indicates their habits, but not their appearance. You will see these birds in different sizes, and with slight variations in color and form, sitting quietly upon some tree-top or lower dead limb, hunched up as if sick, or entirely relaxed in sleep. But woe to the fly that should approach one of them, assuming this to be the case, for, quick as a flash, the apparently sleepy or sick bird darts at the insect, has it in

his mouth and stomach, and is back again upon the very same perch, ready for the next unwary fly or gnat that ventures in his neighborhood.

The Flycatchers all have, in general, upper parts from olive to dark slate-color, darker head and tail, sometimes quite black, with more or less grayish-white on breast. In form they are, while sitting, awkward, and suggest a dwarf race, having apparently — owing to a short neck — a large head in proportion to the body; while the bird is in repose the tail is dropped as low as the Wren's is held high, and the wings droop as they do in a sick canary or chicken. Five species of this family are represented in the accompanying picture, and furnish an excellent illustration of general resemblances and particular differences in these related birds. They have no song, only a call, which is, in all of the varieties described in this book (with the exception of an occasional note from the Pewee), rather strident, and quite in harmony with the whole manner of the bird.

They are a very interesting family. In the East and in California, and in some places in Oregon and in Washington, one species, the

Phœbe bird, is domestic, and joins the Wrens, Bluebirds and Swallows in building nests in and about the homes of men.

THE WESTERN WOOD PEWEE.

General Description:

Upper parts: olive-brown; darker on head, wings and tail.

Under parts: olive-gray, interrupted with slight whitish central-line, from the throat down.

Length, 6.5 inches.

Found in woods, also on trees and telegraph-wires about towns and cities.

The Pewee is the most common of the Fly-catcher family in the Willamette Valley, and perhaps elsewhere. It seems impossible to a person familiar with the Pewee of the East that the one on the Pacific coast can bear the same name, since his usual cry or call is so entirely different, and his habit of coming into cities and sitting upon telegraph-wires so altogether unlike the eastern variety. In the East, the Pewee is found in the lonely woods, where its ever-sad call may be heard, sounding literally like "Pewee," slowly and mournfully reiterated. But here the customary call is a rather strident

sound, and not unlike the cry which a Nighthawk makes while searching the upper air for his insect food. Very occasionally the true Pewee note is heard.

Dwellers in cities are fortunate, however, in not having to go to the woods to watch the flycatching habit of this little creature; and, in learning his way, they learn the way of all the family. See him dart from his perch! Then hear his bill snap as he seizes the unlucky insect, and, without pausing an instant, makes the loop back to the place that he has just left!

PARTICULAR DESCRIPTION.— As in general description above, with this addition; white throat and abdomen, the latter tinged with yellow.

Summer resident.

THE OLIVE-SIDED FLYCATCHER.

GENERAL DESCRIPTION:

Very like the Western Wood Pewee. A little larger.

Length, 7 inches.

Found in evergreen tree-tops.

This Flycatcher is common in this section, but may not seem so to one who does not know

that this is a bird of the tops of tall evergreens, where it nests and from whence it feeds.

This manner of life will enable us always to recognize him, even should we not bring him near through our glass.

Mr. Herman Bohlman, of Portland, one of the most accurate and thoroughly informed students of local ornithology, says of this bird: "He can always be recognized by his exceedingly loud call-note, which sounds like 'wee-chew,' the first syllable being long drawn out and strongly accented."

In color, the bird so nearly resembles the Pewee that one must almost wait for the wings to be spread to discover the distinguishing white flank-tufts which are concealed by the wings while the bird is at rest. Another difference is in the white central-line down the breast, which is more distinct in this member of the family.

TRAILL'S FLYCATCHER.

GENERAL DESCRIPTION:

Upper parts: olive.
Under parts: white and yellow.
Length, 6 inches.

This Flycatcher is probably not to be found in every locality alike in this section, but is abundant in some parts.

This is the western variety of the Alder Flycatcher of the East. It will be difficult for many of us to distinguish him. In order to make the way as easy as possible, I give Ridgway's more technical

PARTICULAR DESCRIPTION. — "Above, olive, usually decidedly grayer on head; wing-bands, varying from dull, brownish-gray to nearly white; lower parts, white, tinged, more or less, with sulphur-yellow underneath, and shaded with olive-grayish on sides of breast; under wing-coverts, very pale buffy-yellow."

Summer resident.

THE WESTERN FLYCATCHER.

This member of the family is on the average a little smaller than the Traill's Flycatcher, and is found most frequently and abundantly near streams and in cañons.

Ridgway says that it nests in clefts of old logs or stumps and that its nests are made of moss and are bulky. Keeler says, "nests on mossy bank by stream," but Mr. H. J. Leland,

of Los Angeles, California, and others, report it as nesting also in shrubs, like water-alders, as well as in holes in river banks.

PARTICULAR DESCRIPTION. — Head, back and rump, grayish-olive; pale wing-bands; breast, dull yellowish; abdomen, more sulphur-yellow; a circle of dull yellow about the eye.

Length, 5.5 to 6 inches.

THE ARKANSAS KINGBIRD.

GENERAL DESCRIPTION:

Head, neck and breast, light ashy-gray; tail, black; abdomen, yellow.

Length, 8 to 9.5 inches.

Found here and there throughout these States.

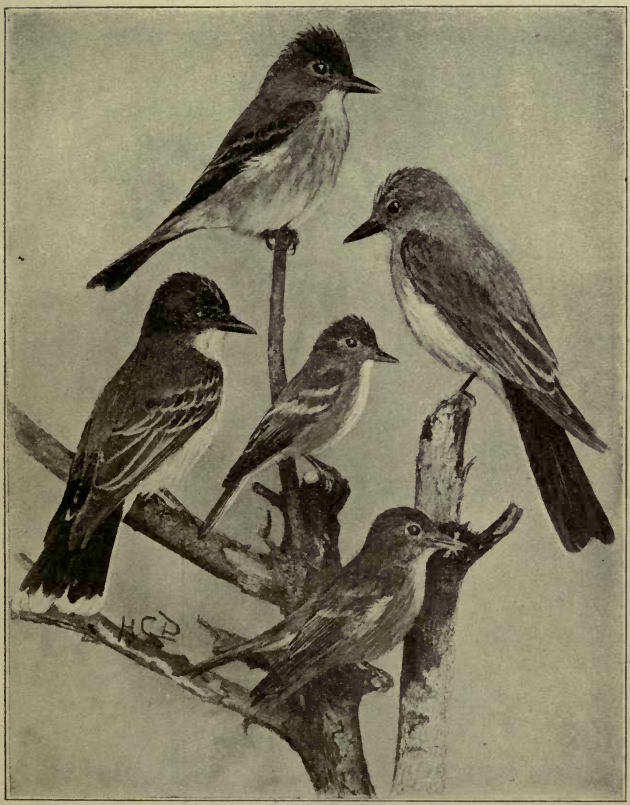
This is the more common giant Flycatcher of these States. He is found in great numbers in the eastern section, and may be seen, nesting upon the cross-bars of telegraph poles in the cities and towns, and darting about the streets for insects. He is given, by the inhabitants of these towns, the false name which the people of the East give the Kingbird proper, "Bee Martin." Thus farmers and others often make the same fatal mistake respecting this bird that they

do with respect to others, and destroy him. The examination of the stomachs of over two hundred Kingbirds by Professor Beal, of the Agricultural Department at Washington, revealed the fact that only fourteen of the total number had any bees at all in them, and those were mostly drones; while sixty per cent of the contents of these stomachs consisted of injurious insects. Every protection should be given to these benefactors of the farmer, and they will more and more come to live and nest in our orchards.

Though a "King of the Birds," he is not, as is generally supposed, a tyrant king, unless he is very unlike his eastern counterpart, "The King-bird." On the other hand, like the bulldog among dogs (unless the bulldog has been spoiled in training), the bird is just and tolerant.

These birds can be readily distinguished from the other members of their family by their size. They are much larger.

PARTICULAR DESCRIPTION. — Head, neck and breast, as above, light ashy-gray; crown, a concealed scarlet patch; back, olive-gray; tail, black, with white web of



Olive sided Flycatcher.

Kingbird. *Arkansas Kingbird.*

Western Flycatcher.

Traill's Flycatcher.

outer tail-feathers; abdomen, and sometimes lower breast, yellow.

Summer resident.

THE KINGBIRD.

GENERAL DESCRIPTION:

Upper parts: blackish-gray.
Under parts: white.
Length, 8.5 inches.

Found in open places, nesting in trees of moderate size.

The Kingbird of the East is not generally distributed in this section. He is rare in the Willamette Valley and southwestern Washington, but is not uncommon in eastern Oregon and Washington, and is reported as not rare about Puget Sound.

In the North Atlantic States, he is to be found at every turn. He sits upon the top of a tree from twenty to thirty feet high, watching for the hapless insect, and on guard against bird-enemies of all kinds. Not even the predaceous crow dare face this defender of his own and other birds' eggs and young. His agility on the wing is unequaled; and no offender may hope

to dodge his fierce thrusts at body, head and eyes.

The Kingbird may be distinguished from the Arkansas Kingbird by the entire absence of yellow in his coloring, and by his darker gray back; his wing-coverts, outer tail-feathers, and tip of tail, are edged or bordered with pure white or grayish-white.

THE SAY'S PHŒBE.

GENERAL DESCRIPTION:

Upper parts: light brownish-gray.

Under parts: breast, light brownish-gray; abdomen, cinnamon.

Length, 7.5 to 8 inches.

In the East, one of the most charming of domestic birds is a member of the Flycatcher family known as the "Phœbe Bird," which in the spring seeks for its nest a shelf or a beam around the shed, barn or piazza. It is a great favorite with children, and is more easily seen in its house-building than the nervous and secretive little Wren.

Fortunately, in some places at least, in Oregon and Washington, a species of this bird is found, doing the same thing for the delight of the

children of this section of the country. It is known as the "Say's Phœbe." It looks, in a general way, like the rest of the Flycatcher family. It wags its tail vigorously, while uttering its call-notes which indistinctly resemble the name "Phœbe." Its nest is sometimes placed under a bridge.

No further description than the general one is needed. The bird is larger than any Flycatcher in our section, except the Kingbird. The Say's Phœbe is rare, but rarer still is the Western Black Phœbe, which is, however, seen in some places in southern Oregon, and may be mistaken for the one first named. The dark slate-color of its plumage on account of which the name "Black" is given, and a distinct V-shaped marking underneath, will serve to identify the Black Phœbe.

THE LAZULI BUNTING.

GENERAL DESCRIPTION:

Upper parts: azure-blue.
Under parts: rufous and white.
Length, 5.5 inches.

Found in low growths of deciduous trees.

If it is a question of beauty of coloring, no other bird may hope to surpass to human eyes this little bit of heaven's blue, with his soft, tawny breast and clear white underparts.

He comes to us rather late in May from the Southern land, where he spends his winters, and may occasionally be seen about suburban houses and orchards before he has found his nesting-place. Once seen, he will always be recognized and remembered.

His song is vivacious, varied, well articulated, and sweet. I have heard one say over and over, "Here! here! why-e, don't you come here?"

The female carries no such wealth of color as her companion and cannot answer him with his free song.

PARTICULAR DESCRIPTION.—Male: Head, neck and upper parts, turquoise, or azure-blue; the back, darker and duller; distinct white wing-bar, sometimes a second fainter one; breast (sometimes sides), tawny; abdomen, white.

Female: Duller grayish-brown on back, tinged with bluish on rump; breast, pale buff.

Summer resident.

THE LOUISIANA, OR WESTERN, TANAGER.

GENERAL DESCRIPTION:

Male: Head and neck, bright red; back, wings and tail, black; rump and entire lower part, bright yellow.

Length, 7 inches.

Found about evergreen and other trees.

Some day about the last of May, when we are watching an Audubon's Warbler in an evergreen, or perhaps passing a group of these trees, we may hear a song like, and yet not like, the Robin's. If at first it seems to be quite the same, a little closer attention will reveal a more metallic note, and a song more regularly and rapidly repeated than that of our more familiar friend. If our ears direct our eyes, we shall not look long before the author of this song will appear in an opening, and reveal to us a striking plumage of red, yellow and black, and a new bird, — or at least one whose general and particular name we may not yet have learned. This is a male of the only variety of the Tanager family upon the Pacific coast north of Mexico, and, as these birds are always in pairs, you may expect to find his mate near at hand.

The Louisiana Tanager received his name

from Lewis and Clarke during their memorable expedition, and is one of the three birds made famous by their discoveries; the other two, Clarke's Crow and Lewis's Woodpecker, are noticed elsewhere. This bird is found over a wide extent of western territory and received the name "Louisiana" because all of the land west of the Mississippi River to the Rocky Mountains, and from the Gulf of Mexico to British America, purchased from France in 1803 by the United States, was known, at that time, by that name.

The Tanager family is an immense and brilliantly-plumaged one. America (North and South) alone has three hundred and fifty varieties; but all the varieties except the one here and the two in the East, live in the tropics. We must, therefore, make the best of our only Tanager, which is, however, both beautiful and abundant.

PARTICULAR DESCRIPTION. — Male: Upper parts, as in general description, except wings are crossed with two yellow bars.

Female: Olive-greenish above, pale yellow below; two faint wing-bars. No black and no red on this bird.

Summer resident only.

THE SAGE THRASHER.

GENERAL DESCRIPTION:

Upper parts: plain brownish-gray.

Under parts: dull white, spotted and streaked with dusky.

Length, 9 inches.

Found in sage-brush of eastern Oregon and Washington.

People in the region of the sage-brush in eastern Oregon and Washington, must be more or less familiar with the bird, very common there, and altogether worthy of an intimate acquaintance. The bird is widely distributed over the sage-brush plains of western North America. It nests in the brush and in service-berry bushes, and pours forth a beautiful song that befits both his kind and his surroundings. His singing is of the Mockingbird order, for he is said to imitate not only other birds, but almost the cries of quadrupeds and the voices of men. He sometimes nests upon mountain sides, and is called the "Mountain Mockingbird."

PARTICULAR DESCRIPTION. — Above, brownish-gray; wings, edged with white, and two white wing-bars; tail, edged with white; throat, breast, and abdomen, dull

white, with buffy tinge on flanks and under tail-coverts; whole breast, thickly spotted or streaked with wedge-shaped markings.

Summer resident.

THE GREAT BLUE HERON.

DESCRIPTION: Bill, long and sharp; very short tail; forehead and crown, white; black streaks on either side of crown, running back they join down the neck; back and wings, blue-gray; throat, white; breast, black and somewhat mottled.

Length, 45 inches.

Found in marshes and along rivers and by lakes.

I cannot do better than to transcribe what Mr. Frank M. Chapman has said about this splendid bird and the murderous assault upon him by hunters:

"The presence of a stately Great Blue Heron or 'Crane' adds an element to the landscape which no work of man can equal. Its grace of form and motion, emphasized by its large size, is a constant delight to the eye; it is a symbol of the wild in nature; one never tires of watching it. What punishment, then, is severe enough for the man who robs his fellows of so pure a

source of enjoyment? A rifle ball turns this noble creature into a useless mass of flesh and feathers. The loss is irreparable. Still, we have no law to prevent it. Herons are said to devour large numbers of small fish. But is not the laborer worthy of his hire? Are the fish more valuable than this, one of the grandest of birds?"

The only excuse offered on this coast, for this savage destruction of a noble bird is that he acts as a game sentinel. He gives the signal to ducks, when the hunter is approaching. Suppose he does sometimes do this, is his sagacity not a cause for the greater admiration of him? Let this magnificent creature adorn our waterways and add to the beauty of our evening sky by his splendid flight.

A permanent resident.

THE AMERICAN BITTERN, OR STAKE DRIVER.

Length, 24 to 34 inches.

This is another member of the Heron family, and looks like his kind, with long legs for wading and bill shaped for fishing.

Go where we may in the United States, this

strange bird will be seen and heard. "Strange," because it makes so loud, peculiar, and commanding, a call. It may be heard sometimes three-quarters of a mile, giving its "pumping" call, "pumper-lunk, pumper-lunk," or its "stake-driving" call, "chunk, chunk." The latter often deceives the ear, and sounds like the report made by the head of an axe, when struck upon a stake that is being driven into the mud.

Mr. Charles Conrad Abbott, however, thinks "no sound in nature is so hopelessly beyond description." Mr. Bradford Torrey has been fortunate and skillful enough to see these birds in the act of making the noise. He reports that it is done with violent contortions of the head and neck.

They are birds of the marsh and the shore, where they wade in the mud or in the tide-made shallows.

PARTICULAR DESCRIPTION. — Above, mainly yellowish, varied not a little with mottling of reddish-brown and black; wings, slate-color, tipped with reddish-brown; lower parts, pale buff, striped with brown; a black streak on the neck.

Summer resident.

THE GREEN HERON.

Length, 15.5 to 22.5.

This is the smallest, as the Great Blue Heron is the largest, of the Heron family. Unlike the latter, however, he does not nest in flocks but in privacy; the home is built in bushes, or upon limbs of trees, overhanging the water, and is made of sticks, as is usually the case with his kind. The Green Heron seems to prefer the woods to marshes. It is widely distributed, being found everywhere in temperate North America, as well as in the West Indies and some parts of South America. Its call is a rather sweet whistle. Its cry, when frightened, is a sort of quawk.

PARTICULAR DESCRIPTION. — Head, glossy green on top; rest of head and great part of neck, reddish-brown, "rich chestnut, varying in tone from cinnamon to maroon" (Ridgway); wings, varying from slate-color and greenish in the scapulars, "with whitish shafts to bottle-green in the wing-coverts, bordered with whitish or buff; lower parts, plain grayish."

Summer resident.

THE CALIFORNIA CUCKOO.

GENERAL DESCRIPTION:

Upper parts: plain brown.
Under parts: whitish; tail, tipped with the same.
Length, 10.5 inches.

This species of the Cuckoo is rare in the Willamette Valley and about lower Puget Sound, but is common in British Columbia, and, no doubt, is to be found in parts of northern Washington. I have heard it on the Peninsula, Portland, Oregon, and others report it in the neighborhood. It is an interesting and useful bird and should be recognized and cherished for its association with poetry. (See Wordsworth's "Cuckoo.")

Ordinarily, the American Cuckoos are confused in people's minds with the English species of the bird, as having the latter's base habit of depositing its eggs in other birds' nests for incubation and giving to others the rearing of its young. Our Cuckoos are not only not guilty of that, but they are among the most useful of our insect-eating birds, being especially destructive of the tent-caterpillar.

No detailed description of the bird is neces-

sary, but one should notice these special marks: The body is in appearance rather long and slender; the bill, long and curved; the lower mandible (i. e. the lower part of the bill) being yellow, the upper part, black; two toes are directed forward and two backward (a characteristic of all Cuckoos).

Summer resident.

THE WESTERN NIGHTHAWK.

GENERAL DESCRIPTION:

Mottled gray, with wide wings; on the wing high in air, toward nightfall.

Length, 10 inches.

Found everywhere in the States.

Some of us associate with nightfall in our boyhood two sounds from the sky which seemed mysterious, and one of them sometimes, perhaps, a little dreadful. One was the steadily repeated nasal "Paent" (Chapman), and the other the occasional sudden booming or whirring sound which the Nighthawk, out of sight, would send down to our ears. We may, from this boyish experience, understand how the Indians became superstitious respecting the latter sound, and

thought it was "the Shad Spirit warning the shoals of shad, about to ascend the rivers to spawn, of their impending fate."

But later we came to know the useful and beautiful bird that, in its splendid free flight over country and city, uttered his friendly though somewhat strident note, and ever and anon — whether for sport, or for an insect, who can tell? — would drop head-foremost from a great height (sometimes several hundred feet), holding wings and tail stiff and at an angle that would produce the booming and jarring sound referred to. This bird has many names in the East — the "Night Jar," the "Bull Bat," the "Mosquito Hawk," and others.

Man's blindness to his friends, the birds, is again illustrated by the way in which some even now regard the Nighthawk as an enemy to poultry.

The Nighthawk is unfortunately named, for he is not a Hawk at all; and, strictly speaking, he never flies at night, but usually after sunset and near nightfall, and sometimes into the dusk. His bill and claws could not handle meat. He is wholly an insectivorous bird.

During the bright parts of the day, he sits upon limbs of trees, or upon the roof of a house, or even again, in the country, upon a rock, quite motionless.

Nighthawks nest upon the ground in rocky pastures and uplands.

The Western Nighthawk differs from the eastern variety in being a little lighter in color.

PARTICULAR DESCRIPTION. — Head, broad; bill, small, curved and pointed; upper parts, mottled, with light grayish-buffy or yellow markings predominating; lower parts, — throat, white; upper breast, narrow bars of buffy and black alternating; lower breast-bars, wider.

Summer resident.

THE POORWILL.

GENERAL DESCRIPTION:

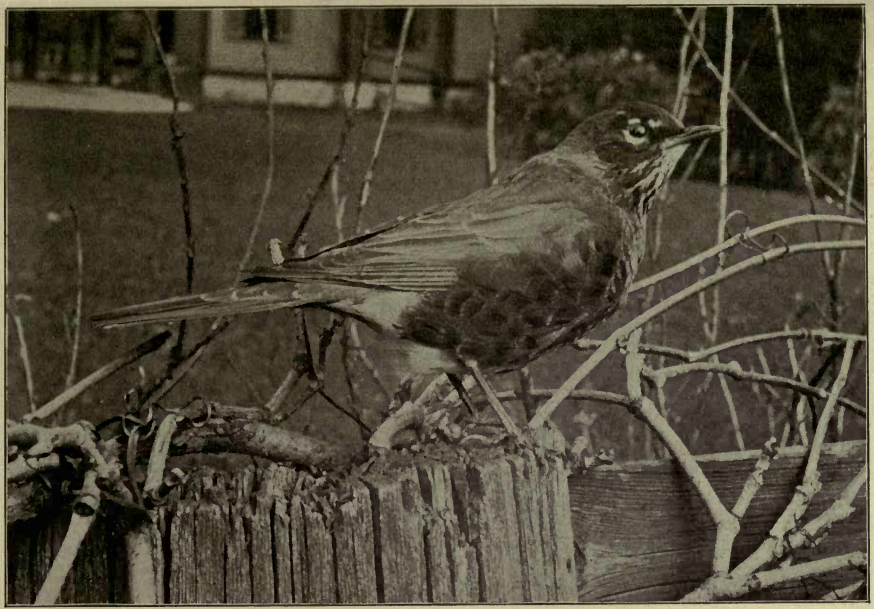
Upper parts: soft brownish-gray, mottled.
Under parts: somewhat lighter than upper.
Length, 7.25 to 8.5.

The Poorwill is, as its looks indicate, closely related to the Nighthawk and it is the western representative of the eastern Whip-poor-will. It is much smaller and its song much less noticeable and commanding. The eastern bird has almost an adult human voice and a superior

fascination. But our smaller bird is not without its own charm, and may suggest the voice of a child, when after dark and in the night, never by day, its love-call is heard.

The bird is rare in the Willamette Valley and around Puget Sound, but grows more common as we move east, till across the Cascade Mountains it may be heard any fine night in May and June, and later. Its habits are not so well known as those of its eastern relatives. But it would not be strange, if it too, when its nest was disturbed by man, should safely carry off either eggs or young to some more secluded spot. This bird is found as much in open prairies and in barren arid land of the interior, as in woods. It nests in high altitudes, where there is frost every night, and also in regions of tropical temperature. It makes no nest, but lays two eggs upon the bare ground or upon rocks.

Captain Charles Bendire, an army officer, who has contributed more than any one hitherto, to a knowledge of the birds of Oregon, has described the love-call of the Poorwill as "Puih-wee-ee," — the last syllable being almost inaudible.



Robin in the Open.

(See foot-note, page 12.)

The bird has a wide range upon the western side of our continent, being found from the Rio Grande through northern Mexico, New Mexico, Arizona and all of the North Pacific States.

PARTICULAR DESCRIPTION. — All above, soft velvety mottled, brownish-gray, with a "moth-like" (Ridgway), or a "frost-like" (Keeler), surface, marked with spottings and zigzags of black; tail-feathers, tipped with white, sometimes with buff; throat, strongly marked with transverse patch of white; breast and abdomen, barred with buffy; under tail-coverts, plain buff.

Summer resident.

THE DOVE FAMILY.

There are two members of this family found within the boundaries prescribed in this book, the Mourning Dove and the Band-tailed Pigeon.

THE MOURNING DOVE, OR TURTLE DOVE.

GENERAL DESCRIPTION:

Upper parts: except head, soft olive-brownish.
Under parts: vinaceous or plum-color. Long tail.
Length, 12.5 inches.

Found everywhere in farming and more or less open country.

Everywhere, in temperate North America, in the summer season, we may see and hear the bird, which is truly named the "Mourning" Dove. To many, the cooing is too sadly suggestive to be agreeable; but to one who has learned to associate this sound with love-making, rather than with lament, it is one of the sweet voices of Nature and could not well be spared. The devotion of the Dove is proverbial and is used to characterize extraordinary human connubial love. These birds are loyal lovers, for even when the nesting-season is over they do not gather in flocks, as do other Pigeons, but are often seen in pairs.

With respect to this bird, farmers make a mistake, too. Because it picks up wheat upon the surface of the field or even takes some (more or less) after it is covered, the Dove is, in some places, looked upon as an enemy. But no bird does more in devouring noxious weed-seeds than this one. An examination of many crops of this species by the Agricultural Department at Washington showed the contents of the crop of one Dove to be seven thousand mullein seeds. When it is known that a Dove fills his crop sev-

eral times each day, the usefulness of this bird may be imagined.

The Mourning Dove is beautiful withal, and too innocent and gentle in habit to make the killing of it, for food, a sport.

PARTICULAR DESCRIPTION.— Forehead, reddish-buff; head, greenish-blue; rest of upper parts, as in general description, except sides of neck, iridescent, with black spot underneath each ear; breast, vinaceous; abdomen, buff; long pointed tail, outer feathers, white.

Summer resident.

THE BAND-TAILED PIGEON.

GENERAL DESCRIPTION:

Male: Upper parts: lead-color, with purplish tints on head and neck; bluish on rump.

Under parts: purplish, varying from greenish-blue to bluish-green.

Length, 16 inches.

Found in the oaks, where it feeds on acorns, and sometimes about farm fields.

The Band-tailed Pigeon corresponds to the Wild Pigeon of the East, so famous for numbers before ruthless man nearly destroyed it, as he has entirely destroyed the buffalo.

Audubon and others report that the Wild

Pigeons of the East once darkened the sky for hours in their flight, and broke, with their weight, the limbs of trees upon hundreds of acres of forests. The bird is now comparatively rare. The reason for this fearful, cruel, and wasteful destruction, was largely the habits of the birds in living the year around in one immense colony, thus falling an easy prey to men who lived by their capture and death. It is said that the Band-tailed Pigeons nest in something like small colonies, remain together in moderate-sized flocks after the nesting-season, are sometimes seen in numbers innumerable, and are often slaughtered by the score. Let the people of the Northwest have a care, before it is too late.

PARTICULAR DESCRIPTION. — As above, in general description; with white collar on back of neck; tail, square, with a black band one-third from the end.

Summer resident.

VAUX'S SWIFT.

GENERAL DESCRIPTION:

On the wing, appears to be black, with short tail and long wings. It has a rapid flight, and is to be seen on cloudy days and near nightfall.

Length, a little more than 4 inches.

Found flying high over woods or houses, and nesting in hollow trees.

No one will ever see this bird except on the wing, unless he handles a dead one or sometimes does as Audubon once did at night, that is, visit some tree which has been prepared for investigation, and with a light look up to the crowded tenement of these bat-like creatures above. Audubon found, by count, nine thousand of the eastern species in one tree.

The eastern variety of the Swift is very like Vaux's, and is popularly known as the "Chimney Swallow," because there these birds take possession of chimneys unused in summer time and proceed to glue their nests against the sides of the chimney flues. The nests are made of twigs snapped off trees while the birds are on the wing. In the fireplace-rooms below, the fluttering and twittering of these happy creatures can often be heard.

Though called Swallows, they are very unlike the Swallow in every respect, except that they feed in the air and have weak feet. They cannot perch, but rest and sleep hanging on the side of the tree or chimney, propped by the stiff

spines at the end of their tail-feathers, using these as do some of the Woodpeckers when the latter cling to a tree-trunk. The stretch of their wings is something amazing compared with their length, — the distance from tip to tip being more than twelve inches, while from tip of bill to end of tail-feathers, when stretched out, they measure only a little more than four inches. This extraordinary wing enables them to perform miracles of flight. It is said they sometimes cover a thousand miles in twenty-four hours.

The Swift on the wing suggests by his general appearance the bat. As he flies, he utters a single note rapidly.

PARTICULAR DESCRIPTION. — General coloration, dusky-grayish; throat, pale-grayish; rump and upper tail-coverts, lighter than the back.

Summer resident.

THE BLACK SWIFT.

This Swift is darker than the Vaux's, and much larger,— its length being seven inches and more. It is a bird of splendid flight and lofty habitat. Mr. Anthony states that it nests in

crevices of the highest cliffs in high mountains, and is sometimes called "the Cloud Bird," on account of its lofty flight and dwelling-place.

Its form is different from that of the Vaux's Swift. The spines at the end of the tail do not extend beyond the web of the feathers.

Many years ago, this Swift was reported as abundant and nesting in the cliffs along the Klamath River, in southern Oregon, or northern California. It is known in the West Indies, and Mr. J. H. Bowles reports it on Puget Sound. Ridgway gives its American habitat as from Colorado to British Columbia. It may be found here and there throughout our section.

DESCRIPTION.— "Uniform dusky or blackish, becoming more sooty-grayish on head and neck; the forehead, more hoary."— *Ridgway*.

Summer resident.

THE WOODPECKERS.

The Woodpeckers are, perhaps without exception, beautiful birds, and fit perfectly their environment in the woods. They often save great forests, which song-birds do not live in,

from oppressive loneliness by their tapping upon some tree or by their cheerful call. The Flicker lives near human habitations, and, as we have seen, seeks human fellowship. Some other Woodpeckers visit the more open country and occasionally excite our curiosity by their less familiar presence.

Of this family in these States, there are five, besides the Flicker, which are sufficiently common for us to learn to recognize them, when we come upon them in the woods or when they visit us. They are the Harris's, the Gairdner's, the Lewis's, the Pileated and the Californian.

One wishing to know all about this family of birds, should read the recent book by Fanny Hardy Eckstrom, "The Woodpeckers." No other book upon the subject is at the same time so thorough and so entertaining.

HARRIS'S WOODPECKER.

General Description:

Upper parts: black, with long white stripe down the back.

Under parts: smoky-gray or light smoky-brown.

Length, 9 to 10 inches.

Found in edges of clearings, burned timber-patches, oak trees and orchards.

This bird and the next one described are relatives of eastern Woodpeckers, but are of darker hue. Harris's Woodpecker is the western variety of the eastern "Hairy" Woodpecker, and, with the Gairdner's, may often be seen in the autumn in the dogwood trees, eating the berries. He is learning to visit the orchards and fruit trees around our surburban homes. And no better friend to the fruit-grower can be imagined. Every borer and all eggs and larvae which are harmful to the tree, are cleared up by this diligent and systematic bird, as he moves around the trunk, searching every crevice.

PARTICULAR DESCRIPTION.—Head, black, with scarlet patch on the head of the male; white line down back and rump; sides of back, black; few white wing-spots; tail, black in center; outer tail-feathers, white; all lower parts, brownish-gray.

Permanent resident.

GAIRDNER'S WOODPECKER.

GENERAL DESCRIPTION:

Almost the same as the Harris's, only much smaller; black above and smoky-gray below. Length, 6 to 7 inches.

Found in burned timber-patches, edges of woods and orchards.

The Gairdner's Woodpecker looks, in general, like a small edition of the Harris's, and as the Harris's is the western variety of the "Hairy," the Gairdner's is the western variety of the eastern "Downy," Woodpecker.

Habits almost identical with the Harris's Woodpecker. He is of the same service in orchards.

PARTICULAR DESCRIPTION. — Head, with red markings for male, black; back and tail, black; wide white line down the back and rump; lower parts, more smoky than the Harris's and more white spots on the wings.

Permanent resident.

LEWIS'S WOODPECKER.

GENERAL DESCRIPTION:

Upper parts: lustrous greenish-black, except fore-part of head.

Under parts: below upper breast, crimson.

Length, 11 inches.

Found in heavy timber, also in oak trees. An occasional visitor in the neighborhood of towns.

This is the famous Woodpecker of the west-

ern part of our continent, bearing as it does the name of the distinguished explorer, Lewis, of the Lewis and Clarke Expedition. It is also greatly distinguished for its altogether unique color. No other Woodpecker is both greenish-black and crimson. Dr. Elliott Coues says: "No other species of our country shows such a metallic iridescence, or such intense crimson, and in none is the plumage so curiously modified into a bristly character."

The bird looks as dark as a Blackbird, on the wing. Its flight is more like that of birds belonging to other than the Woodpecker family, being direct and even, not undulating. It also, like ordinary birds, alights upon boughs. It taps on tree-trunks infrequently. In the forest it lives, feeds and nests high up on the dead top of some tree, or in the more open oak wood. In Oregon, it is more often found in deciduous trees. One of its peculiarities is that it has the habit of the Flycatcher family, in often flying from the tree-top to catch, on the wing, some approaching insect.

This bird, formerly altogether of the deep woods, is, like other birds, changing his habits

with the advent of man, and is not infrequently seen now in the neighborhood of towns and country homes.

PARTICULAR DESCRIPTION. — Fore-part of head, including cheek, crimson; collar, back of neck, gray; back, wings, tail and thighs, metallic greenish-black; upper breast, like collar, gray; lower breast and abdomen, crimson.

Summer resident.

THE NORTHERN PILEATED WOODPECKER.

GENERAL DESCRIPTION:

Body, blackish or dusky-slate; crest (and head in male), bright red; white patches on the wings.

Length, 18 inches.

Found in evergreen forests and occasionally in other heavy timber.

All over North America, to a greater or less extent, is found this splendid member of the Woodpecker family. In some parts of our section, especially, perhaps, around Puget Sound, he is more common than one or two of the varieties already described.

The bird is of immense size, with a red crest

which adds to his striking appearance. His size and crest will immediately distinguish him from all the other members of his family.

PARTICULAR DESCRIPTION. — Body, in general, dusky-slate; crest and head in male, bright red; throat, white; two stripes on side of head, and one on side of neck, white; malar (jaw) stripe, red; wing-patches, white — show most white when flying.

Female: Malar stripe and head, brownish-gray.

Permanent resident.

THE CALIFORNIAN WOODPECKER.

In southern Oregon, this member of the large Woodpecker family is not uncommon, though it is not found elsewhere in our section, except, here and there, one or two that may be out of the ordinary limits.

DESCRIPTION. — Forehead, white; top of head, a crimson patch, smaller on female; back, generally black with bluish lustre; rump, white; upper breast, mostly glossy black; lower breast, streaked with white; sides, streaked with black; abdomen, white. Length, 9 inches.

This Woodpecker is related to the Red-headed Woodpecker of the Eastern States.

Partly a permanent resident.

RED-BREASTED SAPSUCKER.

GENERAL DESCRIPTION:

Head, neck and chest, uniform red, or with white markings and black chest-patch showing indistinctly through the plumage. (Ridgway.) Length, 8.5 inches.

Found in maple, dogwood and orchard trees.

A pity it is that, after a thorough scientific investigation of its habits, this beautiful bird must be condemned. For a long time, it was supposed that sap-sucking was injurious to trees, and the bird was condemned on account of the habit his name indicates. Meanwhile, there were those who denied the fact and affirmed that the bird was wrongly named. At the present time, however, there is little doubt that this species of Woodpecker is truly a sap-sucker, but perhaps not to any great extent. If he were, it would not now be on this account that he would be pronounced an enemy, because taking sap in large quantities, as is done in making maple sugar, does not injure the trees. But the harm which the bird does is twofold: First, he cuts into and eats the inner bark of trees, and, secondly, in making holes for sap, he does it in regular order to-day, and if later he drills new

holes, he does it with reference to the last work done by his kind, and by degrees destroys the channels through which the life substance of the tree flows. He may gradually girdle a tree, always making holes near together in a straight line, and then, perhaps, girdle it again. Each time that a hole is made, the healed wound marks an obstructed passage for the sap.

If the fruit-grower must protect himself against the Sapsucker, it is of the greatest importance that he should be able to distinguish the only Sapsucker that we have in this section from those Woodpeckers which are, as has been pointed out, indispensable to the health of the orchards. The red head and breast with the yellow underneath, will give us the infallible marks of this enemy of orchards. All of the Sapsucker varieties have yellow underneath.

Permanent resident.

THE SIERRA CREEPER.

GENERAL DESCRIPTION:

Upper parts: brown, rusty, and white.
Under parts: white.
Length, 5 inches.

Found in forests, and sometimes in the open upon tree-trunks.

There is only one family of the Creeper in our western hemisphere. Upon the Pacific, we have a species not unlike the one common upon the Atlantic coast. Ours is a little darker in its plumage. The bird is unmistakable in its appearance, with its long, curved bill, and a broad white line over the eye. Its name, "Creeper," exactly describes its whole make-up and movement.

No more particular description is needed.

Summer resident.

THE BELTED KINGFISHER.

General Description:

Upper parts: bluish-gray.

Under parts: white, with a bluish-gray breast-band.

Length, 13 inches.

Found along rivers and creeks, and upon the shores of lakes and ponds.

No more beautiful bird in color lives by our streams and shores than the Kingfisher. His form seems a little dwarfish, with his big head

Bonaparte's Gull.

(See page 215. Also foot-note, page 12.)

and short legs, but he has a noble, fine flight, and great swiftness and skill in his fishing, which saves him from the charge of being awkward. His running, rattling, and somewhat hard cry, as he takes his flight, all must know, who know the bird at all.

We need to admire him more on account of his splendid color, and to know him better on account of his habits. We should watch him as he catches, and see with what great difficulty he sometimes swallows, his fish. We must swear, too, that we will protect him against the monopoly assumed by man of the fishes in our streams. The Kingfisher was by these rivers before man arrived. And he has his inalienable and divine rights, even if he makes serious havoc with the fish in the rivers. But the Kingfishers are not numerous enough or voracious enough to rob man of his privilege, even if they do maintain their right to eat their only natural food. These birds make their nests in river-banks, as does the Bank Swallow.

PARTICULAR DESCRIPTION. — Male: Head, large and crested; bill, long and strong; white spot in front of eye; chin, throat and band around neck, white; back,

wings and tail, gray-blue; a bluish band across the chest.

Female: Rufous on breast and on sides.

Permanent resident.

AMERICAN DIPPER OR "WATER OUZEL."

DESCRIPTION. — Bill, long and slender; tail, very short; head and neck, brownish-gray; back, wings and tail, slaty; lower parts, whitish. In winter, the plumage is mottled, the feathers edged with white.

Length, 8 inches.

Found by mountain streams and waterfalls.

Bird-lovers, in coming to the western side of the continent, count as one of their privileges the seeing of the "Water Ouzel." It is truly a "queer" bird, and if one did not know its habits and should some day see him plunge into a swift mountain-stream and disappear, he might suppose he had witnessed a case of desperate bird-suicide. But did he know this odd creature's ways, he would look for it to come up and land upon a rock at some point quite well below its place of plunge. The fact is, our "Water Ouzel" does this sometimes for mere sport, and sometimes to gather food upon the bottom. It would not be so queer — indeed it would be quite

natural — if he were a species of duck with web-feet, but he more resembles the Snipe. He is a bird of the rushing current and the dashing cascade. Behind the latter, in a large oven-shaped nest, the eggs are laid and the young reared in the sound of their home element and while breathing the spray.

We all ought to know the thrice fascinating ways of this bird, which belongs exclusively to our side of the continent.

Permanent resident.

THE CROW.

Length, 18 inches.
Found everywhere.

Everybody knows the Crow, and he needs no description.

No bird that flies is more sagacious, and on occasion "witty" in the older sense of the term. He knows how to take advantage of every opportunity for his own profit, without the risk of gun or trap. He can count at least three, so that the third gunner may not hope that this wary bird will approach his hiding-place because two of the sporting party have gone away. An

observing farmer's boy in Oregon relates how quickly the Crows discovered that a dog following the plow would kill and bury field-mice. The knowing birds would proceed at once to dig up these bits for their own hungry stomachs.

It is hard to decide just what to do with the Crow. He is not only extremely interesting on account of his sagacity, but he is also a beautiful bird, with his black iridescent plumage and clean, strong body and bearing, and his "Caw, caw," on a winter's day has a charm for the Nature or bird-lover. He is even more than this. He is one of the best friends of the farmer in destroying mice, also beetles and other injurious insects. If it were only the temporary harm that he does to crops and young chickens, he would have so large a balance to his credit that no intelligent agriculturist could afford to destroy him. But his great, and perhaps his unpardonable, sin is that he destroys so many eggs and young of the smaller song and insectivorous birds that, if his tribe is numerous in any locality, a considerable reduction of it is undoubtedly necessary. But in all of this family who live in spite of us, or by our consent, let us keep ever

an intelligent interest, and mingle our admiration with our reprobation.

These States have two varieties of the Crow, the American, common to the East and the West; and the Northwest, peculiar to this territory. The Northwest Crow is somewhat smaller than the American Crow, and more uniform in size — length, sixteen to seventeen inches — while its plumage is less glossy. The American measures from seventeen to twenty-one inches. The Northwest Crow is found almost exclusively upon the sea-shore and in its habits is a good deal like the Fish Crow of the East.

The Crow nests high, in a rude nest made of sticks, with little of comfort for her young.

Permanent resident.

THE AMERICAN RAVEN.

The Raven has been made forever famous, and will always be associated with the weird, through Poe's great poem. No one can understand the poem and how the Raven came to be associated with melancholy and despair, till he has heard the ordinary cry of this secluded bird. In the mountains of eastern Tennessee, I

heard an inexpressibly sad cry above the forest trees, and when told its source, I understood both the meaning of Poe's "Raven" and how, thereafter, to read the "Nevermore" at the end of each verse.

The bird is common in some parts of Oregon, very abundant in British Columbia, and would naturally be found in Washington. He has bluish-black plumage, and looks like a crow, but is much larger. He is shy, but, under exceptional conditions, has become quite wonted about a human dwelling (see Captain Bendire's experience at Fort Klamath, Oregon); however, he always nests in high and quite inaccessible regions.

No further description is necessary.

Permanent resident.

STELLER'S JAY.

GENERAL DESCRIPTION:

A crested bird. Fore-part of body, dark, black, or brownish-black, the rear part, bluish.

Length, 12.5 inches.

Found in evergreen timber and in all sorts of trees and bushes about the timber.

Almost every one knows this noisy and, in the western section of our States, this everywhere-present Jay. He is fine looking and also interesting in spite of his meddlesome, marauding, and, we must own, cowardly habits. We could not afford to exterminate him. He would be a distinct loss to our bird-family, but, like the crow, although with less courage, he will steal birds' eggs and will take the young, whenever he can do it without bringing upon himself an attack from the outraged bird-community upon which he is preying.

While not blaming him for acting out his nature, for which he is not responsible, we must regretfully, and, as painlessly as possible, prevent his becoming too abundant. His crest and color will make a particular description of him unnecessary.

Permanent resident.

THE CALIFORNIA JAY.

GENERAL DESCRIPTION:

Upper parts: head, wings and tail, blue. Middle of back, grayish-brown.

Under parts; whitish, bordered with bluish.

Length, 12 inches.

Found in deciduous trees.

The California Jay is very common in the State whose name it bears, and is also more or less common here. The bird is found in companies, as is the Steller's Jay, also here and there, singly or in pairs.

PARTICULAR DESCRIPTION. — As in general description, with this added — a white line over the eye.

Permanent resident.

THE GRAY JAY, "TALLOW BIRD," OR "WHISKY JACK."

GENERAL DESCRIPTION:

Upper parts: grayish-brown.

Under parts: white or grayish-white, with a whitish collar.

Length, 11 inches.

Found generally around mountains, but sometimes in the timber on lower ground.

Every one who has camped in the timber about the mountains of Oregon and Washington knows the "Tallow Bird," or "Whisky Jack." He takes at once to human society; from the first will share man's table with him, and unless shut out will make havoc of the larder. These

birds are sociable among themselves, as well as with human beings.

The Gray Jay is the western representative of the Canada Jay of the East.

PARTICULAR DESCRIPTION. — Forehead and nasal tufts, white, sometimes brownish; sooty-black hood, bordered on the back with a whitish collar; back, wings and tail, bluish-gray with white streak in back; below, white, turning to dusky in the abdomen.

Permanent resident.

CLARKE'S NUTCRACKER, OR "CLARKE'S CROW."

GENERAL DESCRIPTION:

Upper part: gray; wings, broken by a large white patch.

Under parts: gray.

Length, 13 inches.

Found in and about mountains, mostly in the eastern part of this section.

"Clarke's Crow," sometimes called the "Oregon Crow," is one of the striking and famous birds of the northwest.

As stated elsewhere, he is one of the three birds discovered by the historic explorers, Lewis and Clarke, and is named after the latter.

He is called a Crow, and yet in his noisy habit he seems more like a Jay.

Any one who visits the mountains will make the acquaintance of this interesting bird, always to be found in large flocks. Mr. Anthony relates that about the Sierras in California, Clarke's Nutcracker and the Piñon Jay are to be found in flocks of thousands each. Both of these are not only social among themselves, but they are easily induced to familiar intercourse with men who camp in the woods where they dwell.

PARTICULAR DESCRIPTION. — Bill, long and slender; head, white on fore-part, gray on the rest, and on the back, breast, sides and abdomen; wings, glossy black, with large white patch; tail, white except two middle feathers, which are black.

Permanent resident.

THE PIÑON JAY.

This bird is also a resident of the mountainous parts of our States and has the general habits of the Nutcracker.

PARTICULAR DESCRIPTION. — Bill, long and sharp; body, grayish-blue, becoming blue on head and wings; tail and sides, more blue than black; throat, bright blue, streaked with whitish.

Length, 11 inches.

THE AMERICAN MAGPIE.

This singular bird is not to be seen, ordinarily, near human dwellings, as is the English bird of the same name, When found in small flocks in the western part of these States, he is more shy, but in the eastern part, where he is abundant in places, he is not afraid of man.

DESCRIPTION.— Head, back and breast, smoky-black; shoulders and abdomen, white; wings and tail, iridescent-purple; tail, long and tapering; bill, black. Length, 18 inches.

In California, in the interior valleys of the State, a Yellow-billed Magpie is found. It is very nearly the same in appearance as the one above described, with the exception of its bill. It is possible that a few of these may be seen in southern Oregon.

Permanent resident.

HAWKS AND OWLS.

There are two species of birds that are victims of prejudice and indiscriminating ignorance. They have been treated like snakes, and have been killed at sight by nearly everybody who could use a gun. They are the Hawks and the Owls.

In respect of these, as of some of the other birds described in this book, their enemy, man, has reaped the fruit of his own ignorance and folly in two important regards; he has done what he could to destroy objects of great beauty and interest, and, secondly, he has killed off some of the greatest benefactors to the agricultural interests of the country. The food supply of nearly all our Hawks and Owls consists of mice, insects and reptiles, and not of chickens, or even of birds. In the East, only two of the common varieties of Hawks live upon birds and poultry. Dr. Fisher of the Agricultural Department at Washington has examined hundreds of stomachs of Hawks and Owls, with results like the following: Of the 220 stomachs of the Red-shouldered Hawk of the East, which is usually called the "Chicken" or "Hen-Hawk," only

three contained the remains of poultry. Of the rest, twelve contained the remains of birds; 102, mice; 40, other mammals; 20, reptiles; 39, frogs; 92, insects; 16, spiders, etc.

So, on this northwestern coast of the continent, of the very common Hawks only one — the Sharp-shinned — is always an enemy of birds and poultry. Cooper's Hawk, the other bird of the same habit, is not so common. The rest which will be described are comparatively harmless, and all are of great service. A good rule for us to follow, if we cannot tell the kind of Hawk at sight, is not to kill a Hawk till we see him attacking the poultry-yard.

And as for the Owls, they also are comparatively harmless. The farmers of Pennsylvania had, in the following way, a demonstration of their folly in the destruction of Hawks and Owls. Supposing that these birds fed principally or altogether upon poultry, they secured from the legislature a law setting a price upon every Hawk and Owl killed in the State. After a few years the farms, at least in certain sections of the State, became so infested with mice that the yearly loss in grain was sufficient to

alarm the growers. It was then that a wise man, who knew the relations between mice and Hawks and Owls, gave the fact to the farmers. It resulted in the repeal of the law; and with the increase in these hitherto blindly feared birds, the mice scourge disappeared.

Dr. E. Hart Merriam, Ornithologist and Mammalogist of the United States Department of Agriculture, has estimated that Pennsylvania lost by this folly four and a half millions of dollars in one year and a half.

Oregon and Washington have quite a number of the varieties of the Hawk.

But these are unequally distributed, for while some are common in one place, they are rare in another. Only a part of those found within our States are described below. They are the Sharp-shinned, Cooper's, Western Red-tailed, Swainson's, American Rough-legged and Ferruginous Rough-legged Hawks, the Pigeon-Hawk, Black Merlin, and Desert Sparrow-Hawk.

THE SHARP-SHINNED HAWK.

Rather small; length, 11 to 14 inches.

This is one of the two Hawks which prefer

Western Evening Grosbeak.

(See page 47.)

birds and broilers to mice, grasshoppers, or snakes. He is too small ever to touch hens. It is difficult for one who has not observed birds to distinguish the Sharp-shinned from the Pigeon-Hawk, or even from the Sparrow-Hawk. There is, however, a characteristic common to both this Hawk and Cooper's Hawk, by which one may become at first suspicious and watchful—each has a slender form, being long in proportion to size of body.

PARTICULAR DESCRIPTION. — Male: Upper parts, bluish-gray; top of head, darker; tail, crossed by several blackish bands, narrowly tipped with white. Lower parts, pure white, crossed with light rufous bars and spots.

Female: Colors duller. Lower parts, not pure white.

Permanent resident.

COOPER'S HAWK.

Larger bird than Sharp-shinned; length, 14 to 17 inches.

This is the other poultry and bird Hawk.

DESCRIPTION. — Distinguished in color by having top of head black; sides of head, more or less washed with bluish-gray; sides of breast, bluish-gray also. The tail

of this bird is very rounded, — a clear distinguishing mark.

Permanent resident.

THE WESTERN RED-TAILED HAWK.

A large Hawk; length, 21 to 24 inches.

This bird is one of the most valuable allies of the farmer. In some places he may occasionally get a taste of poultry; but do not kill him till he ventures into the poultry-yard. He will probably not trouble you.

PARTICULAR DESCRIPTION. — Varying from "uniform dark, sooty-brown, through every conceivable intermediate plumage." (Ridgway.) "Above, grayish-brown or blackish-brown mottled with rusty; below, varying from white or buff, more or less streaked with brown dusky markings, to dark blackish-brown. The distinctive mark is the bright reddish-brown tail, edged with buff or whitish, and with one or more blackish bars." (Keeler.)

Permanent resident.

SWAINSON'S HAWK.

Rather large Hawk; length, 20 to 22 inches.

DESCRIPTION. — Uniform grayish-brown above; forehead and throat, white; patch of rufous on the breast of

the male, and of grayish-brown upon the breast of the female.

But this Hawk inclines to melanism, as it is called in ornithology — that is, to a decidedly dark coloring. Specimens of both sexes are found of a uniform sooty-brown. The upper tail-coverts are barred with white. This Hawk must not be confused with the Marsh-Hawk, which can be recognized even at a great distance by a conspicuous white rump. The white forehead marks the Swainson's Hawk.

Probably altogether harmless in respect to poultry. Its principal food in the proper season is grasshoppers.

THE AMERICAN ROUGH-LEGGED HAWK.

Length, 22 inches.

In eastern Oregon, and no doubt in eastern Washington as well, two Hawks are numerous which are rare in the western parts of our States. They have a common and distinguishing mark, indicated in their name, "Rough-legged"; that is, the feathers extend down the leg, nearly to the ends of the toes of the front part of the foot. The American Rough-legged Hawk is so vari-

able in coloration, that it is difficult to distinguish him from some large smooth-legged Hawks in any other way than by noticing the legs and feet.

PARTICULAR DESCRIPTION. — In light plumage, head and neck, whitish, more or less streaked with dark; back, varying from gray to brown; upper tail-coverts and base of tail, white, streaked with brown; under parts, white, streaked with dusky; abdomen, sometimes brown. From this plumage it varies to darker, sometimes becoming almost black.

Summer resident.

THE FERRUGINOUS ROUGH-LEGGED HAWK.

Length, 22 inches.

This Hawk may be distinguished from the preceding one by noting that its name, "Ferruginous," refers to its reddish coat, a color suggested by iron rust, though sometimes this bird, too, is of dark plumage, almost of a chocolate shade, but varied with reddish-brown. He is a fine, striking specimen of the Hawk family, and with his relative, the American Rough-legged Hawk, should not be killed unless actually found making depredation upon poultry.

PARTICULAR DESCRIPTION.—Upper parts and thighs, rusty-red, the former streaked, and the latter barred, by dusky; secondaries and primaries on wings, lead-color; tail, white, varied with gray and rusty; lower parts, white, sometimes slightly streaked with dusky, especially upon abdomen. When the plumage is melanistic (dark), it is still more or less barred with rusty.

Summer resident.

THE PIGEON-HAWK.

Another small Hawk; length, 10 to 11 inches.

It can be easily distinguished from the Desert Sparrow-Hawk by noticing that the prevailing color in the upper parts is bluish-gray and not brown or reddish-brown.

PARTICULAR DESCRIPTION.— Male: Head and back, bluish-gray, marked with fine black lines; tail, slaty, with three broad bands of black, and white tip; under parts, white, somewhat buffy on breast and streaked with dark brown lines.

THE BLACK MERLIN.

GENERAL DESCRIPTION:

Upper parts: plain blackish-brown.
Under parts: very heavily marked with dusky.
Length, 12 to 14 inches.

This is a small Hawk, not uncommon in some parts of the Willamette Valley, and is undoubtedly found in greater or less numbers elsewhere in these States. It can be recognized by the combination of size and color. All other Hawks of dark color are larger.

Summer resident.

THE DESERT SPARROW-HAWK.

Small size; length, 9 to 11 inches.

The Sparrow-Hawk is scarcely a Sparrow-Hawk or bird Hawk at all, so far as his habits are concerned, and Dr. Fisher reports that, after examining 320 stomachs of this bird, he found no poultry. Mice and grasshoppers were found to be the principal food.

PARTICULAR DESCRIPTION. — Top of head, bluish; crown, with or without rufous patch; black "mustaches" on sides of cheek, always conspicuous; back, brown (reddish-brown in female), barred with black; tail, reddish-brown, white tip; wings, bluish-gray, usually spotted with black; under parts, white to varying shades of buff and rufous with black spots.

More or less migratory in winter.

THE AMERICAN OSPREY, OR FISH-HAWK.

The Osprey is seen on both sides of the continent. On the Atlantic coast, especially in New England and upon Long Island, it has been the one bird which the fisherman and farmers have singularly respected and guarded. In my own boyhood, a pair nested in a grove of large oaks back of my home on an island not far from New York City. It was believed that the same pair had been there for two generations or more. Whether an observation of scientific accuracy would verify the current story, I do not know, but these birds were said to arrive and depart on certain fixed calendar days each year. It was supposed that upon a certain day toward the end of March they came back, from what shores and seas I used to wonder and dream about, but never knew. Their nest was built in the top of an oak, and was made of sticks of dead wood and seaweed. Some of the sticks were of considerable size. Every year new material was added to the former site, till the nest became a huge mass against the sky. Mean-

while, the tree-top was dying; and after a few years the winter winds would throw it, with its enormous load, to the ground. A cart would hardly hold all the material of the several years' accumulation.

The name Fish-Hawk indicates the habits of the bird. It flies over the water, and, seeing the fish near the surface, drops suddenly with great speed, and fastens its talons into its finny prey—which is devoured at leisure from some tree, or fed to offspring. The talons, once fastened in the fish, cannot always be withdrawn. It is reported that sometimes the bird misjudges the size of its quarry, and, not being able to release itself, is drawn under the surface and is drowned. I have often seen the Hawk struggle for some time before rising from the water.

The bird is a fine and noble creature in bearing, either at rest or on the wing. With its white head and neck it suggests the Bald Eagle, and is sometimes mistaken for it by the novice. The bird is harmless and adds beauty to our inlets, bays and lakes, and should be carefully guarded.

DESCRIPTION:

Head and neck, white; back, dark brown.

Breast and abdomen, white. Female has breast somewhat spotted with brown.

Length, 22 inches.

Found on the coast, also on lakes and rivers

Summer resident.

THE EAGLES.

These birds do not need a particular description. They are well known, and recognized wherever they are seen.

The Golden Eagle is mostly confined, perhaps, to the eastern parts of our section, while the Bald Eagle may be seen anywhere in the territory.

People of these States should be warned, however, not to kill at sight every Eagle that can be reached with a gun or rifle. Unless the birds are doing us positive damage, they should be preserved on account of the admiration which they theoretically command as the "Bird of Freedom." In the East, the Eagles are protected by stringent laws.

The Bald Eagle has head, neck and tail white, and the rest of the body dark grayish or dark brown. The general color of the Golden Eagle is brownish-black, and the bird is given the name "Golden" from the ruddy-brown feathers on the back of its neck.

Average length of each, about three feet; the female being a little larger.

Permanent resident.

THE OWLS.

There are six varieties of Owls more or less common in Oregon and Washington. The Short-eared, or Marsh, Owl, the Kennicott's Screech Owl, the MacFarlane's Screech Owl, the Dusky Horned Owl, the Burrowing Owl, and the Pygmy Owl.

THE SHORT-EARED, OR MARSH, OWL.

General Description:

Upper parts: black, buff and reddish.

Under parts: white and brownish-black.

Length, 15.5 inches.

Found in and about marshy places.

This is one bird, at least, of the Owl family that does not prefer the woods to the open country, though he is sometimes found in the trees.

He lives and nests in the marshes, and can be seen at nightfall, flying over the marsh, looking for meadow mice, which are shown from scientific investigation to make up the bulk of his food.

There are reports of this bird's habits in these States while rearing its young, that indicate a diet of small birds. It would be well to thoroughly test the matter on this coast before accepting this statement as a general fact. Dr. Fisher found, on examination of 101 stomachs of this species of owl, that no less than seventy-seven contained the remains of mice.

The bird nests upon the ground.

PARTICULAR DESCRIPTION.— As in General Description. Ear tufts, hardly seen; throat, white; breast immediately below chin, quite thickly streaked with dark brown, with streaks growing fewer and larger below, approaching the feet. Eyes, yellow.

Nocturnal habits.

THE SCREECH OWL.

Permanent resident.

The name hardly indicates the character of the vocal expression of this bird, which, in

slightly modified form, covers nearly all of North America. His voice is more like a "tremulous wail" and has been the terror of the superstitious for generations, while it is not seldom mistaken for a human cry of despair by those who do not know its source. It is not always a welcome sound, even when the source is known and there is no superstitious awe in the heart of the listener. But to the Nature-lover the weird call of the Screech Owl is a part of Nature's music, kindles his imagination and touches his heart with satisfaction.

Mr. Chapman reports that Dr. A. K. Fisher, after examining the stomachs of 225 of the Screech Owl proper, found that ten contained insects, 91 of the remaining 125 contained mice, and poultry was found in only one stomach.

There are two varieties of this Owl in this section, the Kennicott's, east of the Cascade Mountains, and the MacFarlane's, west of that range.

The Screech Owl may be recognized by the "tremulous wail" referred to, and by its appearance, — partly from its long ear-tufts and partly from its moderate size. The picture given in

Screech Owl.

this book, is of the Screech Owl proper of the East, but the bird is a good representative of the family.

KENNICOTT'S SCREECH OWL.

PARTICULAR DESCRIPTION. — Mottled and streaked; of varying plumage, but head and back, brown and tawny, tending to dark, with black streaks; in some, a line on edges of back, creamy white; whitish all around the bill; under parts, mottled, with white usually somewhat evident, some tawny, and all streaked with black.

Nocturnal habits.

Permanent resident.

MACFARLANE'S SCREECH OWL.

PARTICULAR DESCRIPTION. — Male: Smaller than female, with dark markings coarser and more distinct.

Female: "Ground color, above brownish-ash tinged with vinaceous, darkest on head and back, palest on wings," with obscure transverse bars and longitudinal stripes of black; "sides of head and neck, thickly and finely mottled with dusky on a lighter ground"; "lores, nearly pure white"; under parts, "ashy-white, lightest on abdomen; linings of wings and concealed silky plumage of sides," yellowish.

Nocturnal habits.

Permanent resident.

DUSKY HORNED OWL.

Length, 24 inches.

People who have been in the timber of Oregon and Washington will have seen a very large Owl, with high ear-tufts (which give him his name), a dark face and a white collar.

This Owl is quite common in the heavy timber, and is a splendid specimen of the family. His hoot is characteristic, and well suits the sunless solitude of the forests.

DESCRIPTION. — All over, mottled and barred brown, usually some tawny, black and white; but general effect dark; the face, usually sooty-brownish, slightly mixed with grayish-white.

Nocturnal habits.

Permanent resident.

THE BURROWING OWL.

GENERAL DESCRIPTION:

Upper parts: brownish, spotted, barred, and varied with white or buffy.

Under parts: white or buffy, barred and spotted with brown.

Length, 9 to 11 inches.

This little Owl has a wide reputation as well as an extended habitat. He is found in many

places, from western Kansas, west and northwest, to the Cascade Mountains in Oregon and Washington. He is the only Owl that lives in the ground. He scarcely ever trusts himself to his wings beyond a short flight to some point near his hole. There are fables current about his living in "Happy Family" fashion with rattlesnakes and prairie dogs. The fact, however, is that the Owls occupy only the burrows that have been deserted by the animals which made them. And if rattlesnakes do occupy the same habitation, it must be one of many rooms, for, in the order of nature, snakes in the same room with the young birds would swallow them, while the old birds in turn would eat the snakes.

The ground-habit of these birds renders them very interesting, and their way of diving out of sight, under the earth's surface, is unique, not only in the Owl, but in any other bird-family — at least in America.

These birds do not hibernate, as some have it, but appear upon comfortable days throughout the cold winters of the regions which they inhabit.

No particular description is necessary.

Permanent resident.

CALIFORNIA PYGMY OWL.

GENERAL DESCRIPTION:

Upper parts: dark brown, shading into reddish, marked with small white spots.

Under parts: white, streaked with black.

Length, 7 inches.

Found in the woods.

This little Owl is peculiar in other respects besides his size. He is a day and not a night bird, but, being very wary of men, keeps out of sight. On that account he does not seem to be very abundant, while yet he may be so. That the owl is numerous in some parts of this section, is well known; for example, in Lincoln County, Oregon. He is peculiar, also, in regard to his call. Dr. Cooper, one of the earliest authorities upon the birds of this coast, declares that "his notes are subdued and clear like the sound of a flute." All the other owls have unmusical voices.

The habits of this little bird are altogether harmless in respect of bird or poultry. Its principal food, so far as investigation has shown, consists of insects. He belongs to this side of the continent, from Colorado to the coast.

PARTICULAR DESCRIPTION. — As in general description, also "top of head dotted with whitish; sides of breast, brownish, more or less distinctly spotted with paler; tail-bands, always white." — *Ridgway.*

Permanent resident

THE KILLDEER.

GENERAL DESCRIPTION:

Upper parts: brownish-gray.
Under parts: white, two bands on breast.
Length, 10.5 inches.

The Killdeer is widely, though irregularly, distributed. A man who has been reared in Maine or in Missouri, may hear this spirit of the sea-shore or of the marshes of his boyhood days, cry, "Killdee, Killdee," in Oregon or Washington. I have heard on the shores of New York sea-islands upon moonlight nights, this weird, though fascinating, sound, associated in my mind with Indian or folk-lore spirit-stories. The bird belongs to the Plover family, and, though preferring the vicinity of water, is not infrequently found upon uplands, lowlands and fields. It nests upon the ground in various parts of this section of the United States.

PARTICULAR DESCRIPTION.— Back of head, back, and wings, brownish-gray or grayish-brown; upper tail-coverts, rusty; tail, chiefly yellowish, varied with white, dusky, and grayish; forehead, stripe back of eye, hind-neck or nape, throat, breast, and abdomen, white; fore-part of crown, stripe across lores, a band encircling neck, and another upon breast, black; eyelids, bright orange-red in life.

Summer resident.

THE NORTHERN PHALAROPE.

GENERAL DESCRIPTION:

Female: Upper parts, lead-color and blackish-brown; under parts, chestnut above, and white below, separated by a lead-colored line.

Male: Smaller, with darker plumage.

Found in late summer and in autumn, and again in the early spring, upon our coast.

The Northern Phalaropes nest in the Arctic regions, at least at, or above 55°. They stop upon our shores for some time, both during the northern and the southern passage,—their winter home being along and below the California coast. These birds are extremely interesting. They seem to be only a Snipe, and yet we often find them swimming quite far from land. Nature has equipped them for this, for they have feet

Killdeer Brooding.

(See foot-note, page 12.)

which are lobed and somewhat webbed. Their connubial habits in the North are most extraordinary, for here seems to be a case of male subjection and bird-"woman's rights," with a vengeance, for, in this instance, it is the female that does all the courting, and the male that does all the brooding when once the eggs are laid. As has been remarked in the General Description, the male is smaller than the female, as seems fitting in this reversal of the usual sex relation.

PARTICULAR DESCRIPTION. — As in general description, and further, a white spot above and below the eye; flanks, white, streaked with black; center of wings, black; breast, white; bill, black; and feet, lead-color.

THE LEAST SANDPIPER.

GENERAL DESCRIPTION:

Upper parts: mixture of black, brown, and buff.
Under parts: white; throat and upper breast, duller white, with white, indistinct spots.
Length, 5 to 6.75 inches.

Dr. Elliott Coues, in his "Birds of the Northwest," has written more charmingly than any one else about this little "Peep," which is found all over our continent save in the colder and the

more tropical regions. The account should be read by all bird-students.

This bird nests in the North, but perhaps not so far north as do his relatives, and he makes haste to rear his young, for, beginning in May, he is ready to return to his accustomed haunts on our shores, in July. After nesting, these Sandpipers gather in flocks, like the other two families described here, and live upon sand-beach and mud-flat their happy lives. They have few or no enemies, except the occasional man, who must feel guilty when tempted to shoot these confiding creatures which beautify and render less bare and lonely our sea-shore. These birds are also found everywhere inland, wherever there are marshy meadows, shores of creeks, rivers and lakes.

Celia Thaxter, of literary fame, who lived upon the Isles of Shoals, on the Atlantic coast, where several species of the Sandpiper had safe, summer homes, has made herself and the Solitary Sandpiper (a few of this species are found here) immortal in her poem, "The Sandpiper," of which the first and third verses are here given :

"Across the narrow beach we flit,
One little sandpiper and I,
And fast I gather, bit by bit,
The scattered driftwood bleached and dry.
The wild waves reach their hands for it,
The wild wind raves, the tide runs high,
As up and down the beach we flit,—
One little sandpiper and I.

I watch him as he skims along,
Uttering his sweet and mournful cry.
He starts not at my fitful song,
Or flash of fluttering drapery.
He has no thought of any wrong;
He scans me with a fearless eye.
Staunch friends are we, well tried and strong,
The little sandpiper and I."

PARTICULAR DESCRIPTION. — Top of head and back, rusty-yellowish, "broadly streaked with black"; wings, grayish to dark brown, edges, paler to buff; wings and upper tail-coverts, brownish-black, edges, pale; sides of head, lores, neck, and breast, ashy-buff, streaked with brown; under parts, as in general description.

THE WESTERN SANDPIPER.

GENERAL DESCRIPTION:

Upper parts: black and rusty, or chestnut.

Under parts: white.

Length, 5.25 inches.

Found in May, August, and September, on our shores and marshes. Nests about the mouth of the Yukon River and elsewhere.

This is the western species of the Semi-palmated (that is, half-webbed) Sandpiper. In its habits, it is like the Least Sandpiper, for in our latitude it lives and moves in flocks, and it has the same gentle, confiding ways. In appearance also, it resembles the Least Sandpiper, but may be distinguished by the greater prevalence of the chestnut shading in this bird and by the fact that the toes of the Least Sandpiper are completely cleft.

PARTICULAR DESCRIPTION.— Feathers of crown and nape, centrally black, edged with rusty and grayish-white; sides of head, and neck, often rusty; lores and ear-marks, rusty, finely streaked with brown; back and rump, like crown, except the edging is rusty or buff, and not white; throat, sides of neck, breast, and abdomen, white, thickly marked with blackish-brown.

Transient.

THE RED-BACKED SANDPIPER.

GENERAL DESCRIPTION:

Upper parts: rufous.

Under parts: grayish-white, finely streaked with dusky.

Length, 8.5 inches.

Found along our shores in April and May, and from August into the autumn.

This Sandpiper may be recognized both by its size and its reddish back. The birds move in flocks, and with a uniformity and unity excelling, perhaps, those of the two species already described. They are as one bird in their rapid turns and winged evolutions. These Sandpipers are larger than those before named.

The bird nests in Alaska, along the shores of Behring Sea, arriving there about June 1st. An observer describes their courtship as most beautiful and entertaining. "As the lover's suit approaches its end, the handsome suitor becomes exalted, and in his moments of excitement he rises fifteen or twenty yards, and hovering on tremulous wings over the object of his passion, pours forth a perfect gush of music, till he glides back to earth exhausted, but ready to repeat the effort a few moments later." Elliot.

The killing of these birds for game is altogether unjustifiable. Their meat is not savory, and to shoot into a flock of these beautiful and graceful creatures on the wing, ought to be impossible to a man who has within him a sense of the beautiful or a heart of compassion.

PARTICULAR DESCRIPTION. — Summer plumage: Crown and back, bright rufous, streaked with black; wings, brown, with white edge on greater-coverts; tail-feathers, brown, darker in the middle; sides of head, neck, and breast, grayish-white, finely streaked with dusky; superciliary line, white; abdomen, black; bill, feet, and legs, black.

Transient.

THE GULLS.

This book would lack something, if it did not at least name some of the most common of those sea-birds which are so much in evidence at certain times of the year upon the sea-shore or on our rivers, inland lakes and even about the docks of our commercial cities.

They are everywhere objects of great beauty, and about the cities and towns upon our coast are useful sanitary agents, devouring the offal which floats upon the harbors.

A number of the varieties of this family are to be seen regularly at certain seasons in these States.

The small Gulls with slim bodies, sharp bills, and tails more or less forked, are known as Terns,

sometimes as "Sea Swallows." They are to be seen along our shores in August, and are very graceful of movement and most of them are beautiful in color.

Two varieties, common perhaps in most localities, are here described; the Arctic and the Black Terns.

THE ARCTIC TERN.

GENERAL DESCRIPTION:

Upper parts: deep pearl-gray, black cap.
Under parts: dull lavender-gray.
Length, 14 to 17 inches.

Found on sea-coast and on lakes in late summer.

On the Atlantic coast such ravages have the plume-hunters wrought among the Terns that the annihilation of one species was thought to have been almost accomplished, while the number of each variety has been greatly reduced. But at present the whole Atlantic sea-coast is patrolled in summer time by paid agents of the American Ornithological Union (the great scientific Bird Society of the United States), and these beautiful sea-birds are being protected and are multiplying rapidly. May the Pacific coast

never have occasion to save our own Terns at such cost!

PARTICULAR DESCRIPTION. — Black cap; sides of head, white; nape and back, deep pearl-gray; wings, upper tail-coverts, and tail, white; under parts, all dull lavender-gray, except under tail-coverts, which are white; tail, very much forked; bill, carmine; feet, red.

The red upon the bill of these Terns is a striking and beautiful feature.

Summer resident.

THE BLACK TERN.

GENERAL DESCRIPTION; Summer plumage:

Upper parts: more or less dark.

Under parts: almost black, or very dark lead-color.

Length, 9 to 10 inches.

The color makes the identification of this "Sea Swallow" very easy, and any one will at once recognize in the small, dark — not really "black" — Gull, the Black Tern.

Summer resident.

Eight species of the Gull proper are here described: the Western or Summer, the Glaucus-winged, the American Herring, the Ring-billed,

the California, the Short-billed, and the Bonaparte's Gulls, and the Pacific Kittiwake.

All but one of these nest in the North, in the Arctic or sub-Arctic regions, and are most in evidence on our coasts in the autumn and winter months.

THE WESTERN, OR SUMMER, GULL.

This is the only permanent resident among our Gulls, nesting in summer time on the islands along the Pacific coast. It is rather smaller than the Glaucus-winged and the American Herring Gulls and has the darkest mantle of any of the species named. It has been and still is, in some parts, tame and friendly, in spite of its abuse by boys. Sometimes it has been seen perching on houses with pigeons. Dr. Cooper says it is the most abundant and characteristic of the Pacific coast Gulls.

DESCRIPTION. — Rather smaller than the American Herring Gull; bill, larger in proportion; mantle, deep lead-color; secondaries and tertiaries, very broadly — for one inch or more — tipped with white; four outer primaries, black; outer quill, with about two inches of its terminal portion, white; remainder of the plumage,

snow-white; bill, deep chrome or wax-yellow, the broad part of mandible marked by a bright spot of red; feet, yellow.

Permanent resident.

The next four Gulls, found all together about our harbors and upon our piers, are so much alike that they cannot be easily distinguished. Two, however, are larger than the other two, namely, the Glaucus-winged and the American Herring. But, on the other hand, one of the other two varieties, the Ring-billed, has a "mantle" like that of the American Herring Gull. (The back and folded wings of a Gull, taken together, are called the "mantle.") The two smaller ones, the Ring-billed and the California, are almost the same, the latter being a slight modification of the former.

By studying through a glass the distinguishing marks upon each of the Gulls, we may learn to tell our friendly winter visitors apart, and to get a more intimate knowledge of our Summer Gull.

The descriptions of the Summer Gull and of the next four birds are taken from Dr. Elliott Coues.

American Herring Gull Brooding.

(See foot-note, page 12.)

THE GLAUCUS-WINGED GULL.

Length, 22 to 27 inches.

This is probably the most common of all the Gulls in our harbors.

DESCRIPTION. — Mantle, average Gull-blue; in winter, head and neck, clouded with dusky, not streaked as in the American Herring Gull; primaries, color of mantle to very tips, marked with definite small white spots; first primary, with a large white sub-apical spot. Bill, yellow with red spot. Feet, flesh color.

Winter resident.

THE AMERICAN HERRING GULL.

Length, 22 to 27 inches.

This bird is common to both the Pacific and Atlantic coasts, in the winter season.

DESCRIPTION. — Mantle, pale dull blue; in winter, head and hind neck, streaked with dusky; primaries (outer wing-feathers), black; bill, yellow with red spots; feet, flesh color. Same size and shape as the Glaucus-winged Gull.

Winter resident.

THE RING-BILLED GULL.

Length, 18 to 20 inches.

The name indicates a distinction in this bird which, however, it shares to some extent with

the California Gull. The ring on the bill will enable us to distinguish it from the American Herring and the Glaucus-winged.

DESCRIPTION. — Mantle, pale dull blue; bill, greenish-yellow, enriched with a black band near the end; the band usually complete but sometimes defective; the tip and most of the cutting edges of the bill, yellow; in high condition, the angle of the mouth and a small spot beside the black, red; feet, olivaceous, obscured with dusky or bluish, and partly yellow; webs, bright chrome.

Winter resident.

THE CALIFORNIA GULL.

DESCRIPTION. — Nearly the same as the Ring-billed; a little larger, 22 inches; black band on bill more perfect; the white spot on the first primary enlarged to occupy the whole end of feather for more than two inches. This is the distinguishing mark.

THE SHORT-BILLED GULL.

Length, 16.5 to 18 inches.

The Short-billed Gull breeds in the Arctic regions in summer, but in winter is found in numbers along our coast. In size, it is between the large Gulls, before described, and the Bonaparte's Gull. The "short bill" will help to identify it.

DESCRIPTION. — Mantle, pearl-color, medium shade; the rest of the plumage, white, except quills, which have black on them. A sure distinguishing mark is a gray wedge-shaped patch on inner web of wings.

Winter resident.

THE BONAPARTE'S GULL.

Length, 12 to 14 inches.

This Gull is more or less common all along our coast, very common at Ilwaco, Washington, and in some other places. It may be distinguished from all of those previously named by its size; it is much smaller. It is to be seen only in autumn and in winter, as it breeds in Alaska.

DESCRIPTION. — Winter plumage of adult: Head, white; back of head, tinged with grayish; ear-coverts, marked with a dusky spot; mantle, delicate pale pearl-gray; three outer quills in wings, white and gray, but terminals, black; rest of plumage, pure white; feet, in life, pale flesh-color; bill, deep black. (Ridgway.)

Winter resident.

THE PACIFIC KITTIWAKE.

Length, 16 to 17 inches.

This Gull is quite a common winter resident upon our coast, and may be identified by notic-

ing that the tail is slightly emarginate, that is, a little divided in the centre of the extremity. The size is about that of the Short-billed Gull, and the color is not very different. The mantle is, however, a deep pearl; the rest of the plumage, white; and the hind part of the head and neck are washed with gray, with a dark plumbeous suffusion before and behind the eyes; bill, yellow; feet, blackish.

Winter resident.

WINTER BIRDS.

Some of our birds are "Winter Birds," either because, nesting elsewhere, they are with us only in winter and early spring, or because, in that season, they are more about our homes.

Amongst them are some of the most beautiful, familiar and entertaining of any of the feathered creatures that come to us. These are the Junco, the Varied Thrush, Townsend's Sparrow, the Titlark, the Crossbills, the Redpoll and the Snowflake.

Each of these varieties may nest, more or less, within our States, in higher altitudes or on

our northern borders, Two or three of them, we know, do this to some extent, and one of them, the Junco, builds its nest in our vicinity.

The Western Evening Grosbeak is not put in this list, but is described as among the "February birds," because he comes so late in the winter, and lingers so long in the spring

Then there are the Chickadees, Nuthatches and Kinglets, which, though permanent residents, are more easily seen in our orchards and near our homes in winter — the Kinglets being also, however, an especially interesting early spring bird.

THE OREGON JUNCO.

General Description:

Male: Upper parts: black head and neck; back and tail, dark gray.

Under parts: light gray and white.

Length, 5.75 to 6.75 inches.

Found everywhere in western part of these States.

This is the most familiar and entertaining of the winter birds. Nearly every child knows the "Snow Bird," who comes about our suburban, and sometimes our city, homes, to catch the scattered crumbs and the bird-seed which thoughtful

human friends have provided. How neat and admirable their dress! The male with his black, cowl-like head, and the female in her modest Quaker-like garb, and both with an exquisite flesh-colored bill — the daintiest bill of any bird that we see in these parts.

The little creature is often rendered quite tame by attention and careful feeding. He may become very much at home with us by the right treatment, by letting him associate his crumbs or bird-seed with our bestowal, and with some soft and oft-repeated whistle. He will soon feed at your feet, and even from your hand. His song is a sweet trill.

The Junco resides largely, perhaps altogether, in our region during the whole year, but during the nesting-season it retires so entirely from its winter haunt, and lives so obscurely till winter comes again, that it is recognized popularly as a Winter Bird.

PARTICULAR DESCRIPTION. — Male: Head and the whole neck, black; back and upper tail-feathers, dark gray; breast, grayish-white; abdomen and outer tail-feathers, white.

Female: With head, back, etc., dull slate-gray; otherwise like the male, but colors duller.

A permanent resident, but very retired during nesting and summer time.

THE VARIED THRUSH.

GENERAL DESCRIPTION:

Upper parts: slaty, like the Robin, with yellowish stripes upon the wings.

Under parts: orange-yellow breast.

Length, 9.5 inches.

Found all over the western valleys of the two States.

This bird — which comes to us in the autumn from Alaska, where it nests in large numbers — is sometimes called the "Alaskan Robin." Its general appearance is Robin-like, and therefore it is also called the "Varied Robin." It differs mainly in having yellow markings. It is a beautiful bird in its variegated coloring. The orange shade upon the breast is much brighter in some of the birds than in others, and gives a momentary effect of the gorgeous coloring of the Oriole's breast.

These birds are wild and retiring upon their arrival in this section, but before the winter is over they are seen not far from, and sometimes very near, houses. The writer saw one on

March 19th, 1901, picking around the back-door step of a house in suburban Portland.

Some of these Thrushes linger into April, but then they are off to their secluded nesting-homes, most of them twelve hundred miles north.

One or two nests of this species have been discovered in Oregon, and a number of birds have been seen at nesting-time in the Coast Range Mountains in the same State.

John Burroughs, in his report of his visit to Alaska with the "Harriman Expedition," in 1899, speaks of their nests and of their sweet song, with which they never favor this locality.

PARTICULAR DESCRIPTION. — Head and tail, blackish-brown; back and wings, slaty; orange-rufous stripe back of eyes; three of the same color upon each wing; throat, breast and sides, orange-rufous; black crescent on the breast.

Winter resident.

THE TOWNSEND'S SPARROW.

GENERAL DESCRIPTION:

Upper parts: plain dark brown.

Under parts: white, with numerous large triangular brown spots on breast, and streaks of the same on sides.

Length, 7 inches and more.

Found in winter, in hedges and by roadsides and in shrubbery in fields, in company with the Rusty Song Sparrow.

The "Townsend's" is one of the western representatives of the eastern Fox Sparrow, and like him is a noble bird, being the largest and the most striking in appearance of any of the family. The members of this special tribe of Sparrows are very numerous in winter in western Oregon and in Washington, and it is to be regretted that in the spring they leave us to nest in more northern parts. No particular description is required, as the size of the bird, and the spotted breast, will make his identification easy.

Winter resident.

THE AMERICAN PIPIT, OR TITLARK.

General Description:

Upper parts: grayish-brown.

Under parts: buffy, streaked on the breast; outer tail-feathers, white.

Length, 6 to 7 inches.

Found in flocks in winter, upon bottom lands and fields that have been overflowed.

When one is passing some low lands in winter,

and sees a large flock of sparrow-like birds rise with irregular flight, calling "dee-dee, dee-dee," and sometimes returning to the spot from which they were flushed, he may be sure he has found the American Pipit, or Titlark,—also called the Brown or Red Lark. It is with us in abundance in winter time, but goes in summer (like the Evening Grosbeak) to northern parts or to the mountains, above the timber line, to nest upon the ground. The bird is called a Lark because it lives upon the open ground, where it prefers to run rather than to rise and fly; and when flushed it is only for a moment on the wing, and then not far from its beloved earth. It is so named, also, because when it does take a spontaneous flight higher than the enforced one, it sings on the wing. It is said to be "expert in catching a small variety of insect or fly which frequents the lowlands."

But the Titlark belongs to the Wagtail family, because while on the ground he teeters and twitches and wags his tail in a comical fashion characteristic of the family.

PARTICULAR DESCRIPTION. — Head, back, wings and tail, grayish-brown; tail and wings, more dusky; a pale

buffy line above the eye; throat, breast and abdomen, buffy, with breast and sides streaked with dusky.

A winter resident. Perhaps some nest in these parts, as they have been seen here in July.

THE AMERICAN CROSSBILL AND THE REDPOLL.

There are two Winter-Birds, which are not common but which may be discovered by some one who would like to identify them. They are the American Crossbill and the Redpoll.

The first-named, with his crossed bill, when once seen, will scarcely need further description. It is enough to add that his color is generally reddish, — a color resembling that of the California Purple Finch, — and his size about six inches. His crossed bill is exactly fitted to cut open pine cones, the contents of which constitute his chief food.

The Redpoll is smaller, its general color streaked and dusky, with white and brownish ground; the rump and breast are rose-red in the male, and, as the name indicates, he has a crimson crown.

These birds both nest in the north, or in un-

known places in the mountains, and are seen only in winter and in early spring.

THE SNOWFLAKE, OR SNOW-BUNTING.

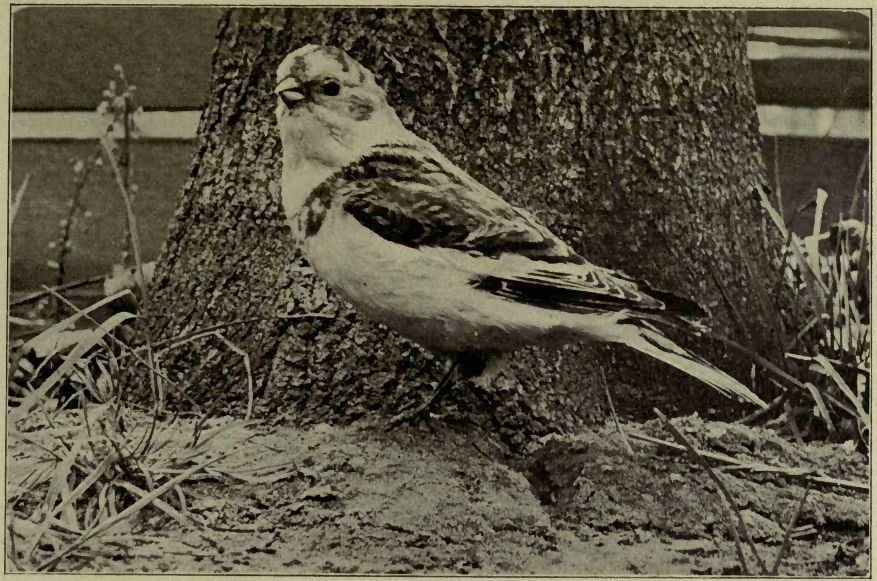
Length, 6.5 inches plus.

The Snowflake, or Snow-Bunting, which nests within the Arctic Circle, may be seen not infrequently during the winter months in eastern Oregon and Washington. His coming is not for a warmer temperature, it would seem, but for the light, and for the abundant food that may be gathered from the tall weeds and grasses standing above the snow. He may be seen on the northern prairies of our country, clear across the continent, and the little creature seems fairly to rejoice in the blizzards and the low temperatures, in the severity of which men and beasts perish.

DESCRIPTION. — Winter plumage: Head, back and inner wing-feathers, more or less reddish-brown and black; tail, centre-feathers black, outer-feathers white; breast and sides, slightly brownish; abdomen, white.

Only a winter resident.

His winter habitat is over the whole northern half of the United States.



Snowflake.

(See foot-note, page 12.)

THE CHICKADEES.

The Chickadee is assured of the friendship of every one who knows him. This little animated bunch of feathers, with his cheery manner and happy song, may be seen in the winter time, scouring the limbs of our fruit-trees for the eggs which will later, unless destroyed, become canker-worms and other pests of the orchard.

His dress befits his manner, and taking him altogether, one might be justified for once in using the phrase, "a love of a bird."

In the colder regions of the Eastern States, nothing gives more cheer to a frigid winter morning, with the mercury at 20 degrees below zero, than this happy little creature, singing out into the cold air his oft-repeated "Chick-a-dee — dee-dee," while he moves from limb to limb.

May he often find, in winter time, that, in gratitude for his merry song and his helpfulness in the orchard, some human friend has tied a small piece of beef-suet or cheese-rind upon a tree to add a little variety to his menu. With a little leading and care, this tempting provision, placed upon a board at the window, will bring

the Chickadees, also the Nuthatches, to close fellowship with you.

There are two varieties of the Chickadee common in our section, the Oregon and the Chestnut-backed. They are enough alike in their looks and habits to deceive any one who does not see them near to, or through a glass. But the chestnut color is sufficiently clear to mark the distinction, once it is seen. The "Chickadee" call is not so clear in the Chestnut-backed as in the Oregon, and neither gives so distinct an articulation to this word, which gave these birds their name, as does the eastern Black-capped Chickadee, of which the Oregon Chickadee is the western variety.

The two varieties do not mingle much, but each, after nesting, loves the company of its own kind, and, as we shall see elsewhere, that of the Nuthatches as well.

THE OREGON CHICKADEE.

PARTICULAR DESCRIPTION. — Head, neck, throat, and upper breast, black; back and tail, gray; a V-shaped white section with the point at the bill, extends back to

the shoulder; lower breast, white; abdomen, buffy. Length, 4.5 to 5.25 inches.

Permanent resident.

THE CHESTNUT-BACKED CHICKADEE.

PARTICULAR DESCRIPTION. — The same as the Oregon Chickadee, except head, brownish-black instead of black; back and sides, chestnut; abdomen, light gray. Length, 4.5 to 5 inches.

Permanent resident.

THE BUSH-TIT.

GENERAL DESCRIPTION:

Upper parts; brownish-gray.
Under parts: light smoky-brown.
Length, 4.5 inches.

Found upon oak trees and also upon the limbs and twigs of young deciduous growth.

Not unlike the Chickadees in general form (they belong to the same family), or unlike the Kinglets in habits, are the little Bush-Tits which may be seen in small flocks in winter time, hanging from the twigs of young growth, and searching, like their relatives, for what are to them dainty bits of insect-life. Their "cute"

ways and gentle, though lively demeanor, attract attention and invite study.

This is one of the three varieties of birds that build a pouch-like nest. That of the Bush-Tits is much larger than would seem needful for these little mites, or possible for them to construct. The nest is usually only five or six feet from the ground, in low growth, but has been seen much higher in evergreens.

PARTICULAR DESCRIPTION. — Head, rather sooty; back, deep brownish-gray; lower parts, as above, but deep smoky along the sides.

Permanent resident.

THE COAST WREN-TIT.

GENERAL DESCRIPTION :

Upper parts: deep umber-brown.
Under parts: cinnamon-brown.
Length, 6 to 6.5 inches.

Found in and about Coast Range Mountains, especially in southern Oregon.

This is one of the small and peculiarly fascinating birds. It resembles the Chickadee in general appearance, but has the manners of the Wren. He is like the latter in sprightliness and

jerky style. The song is striking, and on account of it the bird, in Colorado, its eastern territorial limit, is called the "Scale Bird." Mrs. Bailey (née Merriam) says, "He is not seen unless you go to the brush to look for him, but, wherever you are, you will hear the clear ringing voice running down the scale, the bell-like tones now coming from the chaparral of the valley, now from the boulder-strewn hillsides above. The Wren-Tit seems timid about singing in sight. A common form of the song is a scale of seven two-syllabled notes, — 'tip-it, tip-it.'"

There are possibly two varieties of this Tit in the section covered by this book. The one described here is certainly not uncommon on our coast.

Osgood gives a Particular Description nearly as follows :

Upper parts, almost uniformly umber-brown, darkest on head, becoming blackish on wings; tail, blackish-brown, with tinge of olivaceous; flanks, about like rump, insensibly grading into side; lores, cheeks and sides of head, dark ashy; a white spot above and below the eye; throat, breast and sides, deep brownish-rufous; limited area in middle of abdomen, buffy-yellow.

Permanent resident.

THE NUTHATCHES.

What are these birds, in whose company the Chickadees and the Kinglets rove in winter time? The Nuthatches are creepers, and have long bills which are a great advantage in probing in the crevices of the bark for the insects that the Chickadees and Kinglets, with their short bills, cannot reach. The Nuthatch has slightly elongated toe-nails, which may account for the great ease with which it runs up or down tree-trunks. They are called Hatches or Hackers, because some of the species use their bills to hack or crack nuts which they have previously hidden in crevices.

Edith M. Thomas has written a poem, "To the Nuthatch," which so perfectly describes this bird of the tree-trunk, that it is inserted here:

"Shrewd little haunter of woods all gray
Whom I meet on my walk of a winter day —
You're busy inspecting each cranny and hole
In the ragged bark of yon hickory pole;
You intent on your task, and I on the law
Of your wonderful head and gymnastic claw!

The woodpecker well may despair of this feat —
Only the fly with you can compete!
So much is clear; but I fain would know
How you can so reckless and fearless go,
Head upward, head downward, all one to you,
Zenith and nadir the same in your view?"

There are two varieties of the Nuthatch in our States — the Red-breasted, and the less common Slender-billed Nuthatch.

THE RED-BREASTED NUTHATCH.

General Description:

Upper parts: black and brownish.
Under parts: rufous, or light rusty-red.
Length, 4 to 4.5 inches.

Found on trunks and large limbs of trees, both evergreens and deciduous.

This little creature, creeping swiftly along the under side of a limb as a fly runs along the ceiling, uttering his "Tai-tai-tait," is truly about as curious a specimen of bird-life as we shall find among Land-birds. His long, sharp bill has such incessant use that it is a wonder it does not wear down and become short.

PARTICULAR DESCRIPTION. — Male: Head and neck, black; black stripe passing through eye to shoulder, and white stripe over eye; back and upper wing-coverts, lead-color; tail, black, barred with white near the end, tipped with pale brown; below, pale reddish-brown.

Female: Top of head, gray.

Permanent resident.

THE SLENDER-BILLED NUTHATCH.

GENERAL DESCRIPTION:

Upper parts: gray.
Under parts: white.
Length, 5.5 inches.
Found on tree-trunks, etc.

This Nuthatch is not equally common in all parts of our States, but is not infrequently found — perhaps more frequently — in the eastern parts of this section. It is the western species of the eastern White-breasted Nuthatch.

The name Slender-billed describes one main characteristic of the bird. Its habits are substantially the same as those of the Red-breasted Nuthatch.

PARTICULAR DESCRIPTION. — Male: Top of head and neck, black; back, slate-color; wings, dark slate; white breast and under parts.

Permanent resident.

THE KINGLETS.

In winter or in early spring, one looking for birds will often come across some little creatures with charming dress and ways, whose names and unrevealed beauties one should make haste to know. They are the smallest of birds after the Hummingbirds and Winter Wrens. In winter they are often in the good company of the Chickadees, and sometimes of the Nuthatches, — as if relatives, in a way. And a happy family they are, without jealousy or even occasional contention.

The Golden-crowned and the Ruby-crowned Kinglets answer the Chickadee's "Chick-a-dee, dee, dee," with their own peculiarly bright "Ti, ti" or "Zei, zei," and in March may be heard their exquisite songs.

THE WESTERN GOLDEN-CROWNED KINGLET.

GENERAL DESCRIPTION:

Upper parts: decidedly olivaceous; a golden crown.

Under parts: "strong buffy tinge."

Length, 3.15 to 4.5 inches.

Found in trees, often in evergreens.

The Western Golden-crowned Kinglet differs

from the eastern variety only in having somewhat brighter colors. Its song is just the same and its habits identical. Like the Chickadee, zero weather has no effect upon its cheerful spirit. It is as restless as the Chickadees and the Nuthatches that it keeps company with. It hangs upon the smallest twigs, searching for insects.

In the East, they do not hear the Golden-crowned Kinglet's song, or see its nest, except in the northern parts of the Northern States and in the mountains, whither it goes in May. The western species undoubtedly nests in parts of our States, though its nests are not yet reported.

Mr. Brewster describes the song of the bird as beginning with a succession of five or six fine trills, high-pitched, somewhat faltering notes, and ending with a short, rapid, rather explosive warble. The song is out of proportion to the bird's size. It is an attractive little singer; but does not equal its relative the Ruby-crowned Kinglet, in this important respect.

PARTICULAR DESCRIPTION. — Male: Head, neck, back and rump, bright olive; wings and tail, slightly dusky, margined with olive-green; breast and under parts, brownish-buffy; center of crown, intense orange,

bordered with bright yellow, enclosed by black line; white line over the eye.

Female: Similar, but center of crown, lemon-yellow, and grayish underneath.

Permanent resident.

THE RUBY-CROWNED KINGLET.

GENERAL DESCRIPTION:

Upper parts: generally the same in color as, but a little duller than, the golden-crowned Kinglet.

Under parts: light yellowish-gray; vermilion-red crown, usually concealed.

Length, 3.75 to 4.6 inches.

Found generally distributed.

The habits of this bird are nearly identical with those of the Golden-crowned Kinglet, but he is a superior singer. His song is a marvel of beauty and strength; he is always generous with it, even in winter pouring his sweet notes upon the cold air, perhaps in memory of past, or in contemplation of future, love and home.

Dr. Coues (one of America's greatest bird-students) remarks, concerning the phenomenal strength of the song of this little bird: "The sound-producing organ is not larger than a pin-head, and the muscles that move it are almost

microscopic shreds of flesh, yet its song may be heard two hundred yards": and "the Kinglet's exquisite vocalization defies description."

PARTICULAR DESCRIPTION. — Male: Head, neck and back, grayish-olive; crown-spot, bright "scarlet-vermilion," usually concealed, no enclosing colors; a fine white ring around the eye; two whitish wing-bars; breast and abdomen, yellowish-gray.

Female: Similar, but without vermilion crest.

Partly a permanent resident.

CHAPTER VI.

Upon Imported Song Birds.

In 1889 and again in 1892, some of the German-American citizens of Portland, with characteristic poetic taste and love of Nature, and out of affectionate remembrance of associations in the Fatherland, secured the importation of several varieties of their native song-birds.

The Skylark, as we have seen, is one of these, and it alone has repaid and will increasingly, in all time to come, repay the cost and the trouble incurred in settling the stranger songsters upon the Pacific coast. The author, however, sympathizes to some extent with the great body of ornithologists in this country who do not believe in taking birds from the environment which formed them and placing them in another. It seems to be a violation of natural and æsthetic laws. Again, another imported bird besides the English Sparrow, the Starling, has already become harmful on the Atlantic coast, where it

has been breeding and multiplying now for some time.

The birds introduced and released in the vicinity of Portland included two varieties of Thrushes, one variety of Goldfinch, one of the Starling family, Nightingales, Crossbills and others.

Of these, only the Skylark and Starling are sufficiently in evidence to make it possible for me to bear personal witness to their presence. And I find that no one of the careful and constant observers in and about Portland, who are making ornithology a study, has seen any other than the two above-mentioned birds.

Our German friends, however, who are of course more interested, report the presence of the European Goldfinch in the groves and orchards about Portland; also of the Song Thrush in certain gulches, and the Black Thrush in the neighborhood.

The Skylark has been fully treated under its name in its proper place in this book.

THE STARLING.

"The Starling," unlike any of the birds related to it in this country, lives and nests in buildings

and not in trees,—and in buildings in cities, moreover, which seems quite strange to us. It is, however, only a proof of what change in the habits of birds is wrought by civilization. It is difficult to say what our own birds may do in the future, when Americans have won back the confidence of our now truly "wild" birds. In this spring of 1901, the Starlings may be seen around the top of the tower on the Perkins Hotel in Portland, nesting in the gilded ornaments on either end, and also about the Blagen Block, First and Couch streets, nesting in perpendicular holes just over each of the two ornamental heads on the west face of the structure.

The careless observer would take these Starlings for "just Blackbirds." But though Blackbirds in appearance, they belong to a family of their own and must be recognized as such. The principal distinctive mark in this Starling in summer time is its yellow bill, which even the indifferent will notice when once their attention is called to it.

The difference between the summer and the winter plumage in the Starlings is very marked. In the spring it is quite black, and in the winter

decidedly mottled. The difference is indicated in the following

DESCRIPTION. — Adult: Summer plumage, both sexes alike; head, neck, breast and abdomen, iridescent black; wings and under tail-coverts, spotted buff and mottled; tail, rather short and brownish; bill, yellow.

Winter plumage: Male: Black, spotted with white all over. Female: Dark brownish, spotted liberally with buffy; bill, black.

If those who have this book should come across either of the Thrushes or the Goldfinch, the following descriptions will help them to identify the birds. It is not impossible that some of the foreign varieties released about Portland may be found far from that point.

THE SONG THRUSH.

DESCRIPTION. — Head, back, wings and tail, darkish brown; throat, breast and sides, whitish, well spotted with brown. Female: Lighter in upper parts.

Length, 8.5 inches.

This Thrush resembles the Wood Thrush of the Eastern States.

THE BLACK THRUSH.

DESCRIPTION. — Male: Black all over, like Blackbird, but with whitish bill. Female: Sooty above; throat, mottled white and brown; breast, light and dark brown.

Length, 11 inches.

THE EUROPEAN GOLDFINCH.

DESCRIPTION. — A circle of red around bill, extending up to crown and under throat; lores, black, and black around eye; white collar around neck; back, brown; wings and tail, black; breast, buffy-brown; abdomen, whitish. Female: Lower breast, whitish.

Length, about 5 inches.

CHAPTER VII.

How to Domesticate and Tame Birds.

Everybody enjoys the familiar presence of "wild" birds. Even persons who have never thought much of these winged creatures are pleased when the Wrens or Bluebirds force themselves into notice by nesting in the letter-box at the gate, or pre-empting a cranny under the piazza roof.

People do not realize that, with a very little trouble, they might have a hundred bird-neighbors in summer, where now there are none, or only a pair or two, who have come uninvited and unprovided for. Every home in the country or near our cities, and very many in the towns, and even in the cities themselves, might have, with each coming of spring, a score of feathered friends, returning from a far-away southern wintering.

Nothing so civilizes and humanizes children as

Children and Cedar Waxwing.

this care and interest. In Worcester, Mass., in one district where the care and protection of birds have been taught to and inspired in the children of a public school, vandalism has ceased among the boys. They are busy providing bird-boxes, watching for nests in the trees, guarding the fledglings against cats, etc., and their hearts have softened meanwhile. Were it only a measure for taming and civilizing boys, the taming of birds would be worth while.

But what a ministry of delight do these angels of song and grace bring to old and young, when once we have taken them under our care! "Let but a bird — that being so free and uncontrolled, which with one stroke of the wing puts space between you and himself — let him but be willing to draw near and conclude a friendship with you, and lo, how your heart is moved!" — *Mme. Michelet.*

As remarked in another place in this book, song-birds seek the company, the protection and the friendship of man. And when these are given, the birds sing and fly with a freedom, confidence, and even affection, that are impossible while they live near us in fear and suspicion.

John Burroughs says of the English birds which are thus loved and cared for: "They sing with more confidence and copiousness, and as if they, too, had been touched by civilization." He also says, "Wood birds here (America) are house and garden birds there (England)."

With reference to nest-building, there are two sorts of birds anxious to live with and near us. In the first place, those that want to share our home or our outbuildings, or who look for some box provided hard by our door. The other sort are the birds which, if encouraged and protected, would seek our vines, shrubs and trees for their nesting.

What can we do to bring these little creatures to our homes?

There are several varieties of birds that search out places for nesting under piazza roofs, in boxes, about the eaves and cornices of our houses, or in our barns: the Violet-Green Swallow, the Eave Swallow, the Barn Swallow, the Martin, the Bluebird, the Parkman's House Wren, and sometimes the Vigors's Wren; in some places, the Say's Phoebe, and perhaps, the Western Black Phoebe.

As stated elsewhere in this book, the Violet-green Swallow is not to be confused with the Eave Swallow that seeks in companies to build mud nests against the house; the former asks for a box in which to rear its young. Even now, as I am writing this chapter, a pair of these birds of exquisite color, perfect grace of movement, and even, I find, of sweet song, are flying in front of the second-story window where I sit, and, pausing on the wing in front of me, seem pathetically begging me to furnish them a home, promising me full measure of delight if I will but grant their evident prayer.

Ornamental boxes for the Violet-green Swallow may be made, painted the color of the house and put up under the eaves; but ruder boxes are more enticing as we shall see. Or again, these birds may come to a cluster of houses set upon a pole in the yard. It would be better, however, to reserve the nests upon the pole for the Bluebirds and the Martins.

I have given a hint elsewhere about allowing the Eave Swallows to set their mud nests against our buildings. True bird-lovers will do all they can to invite such neighborliness; and the use of

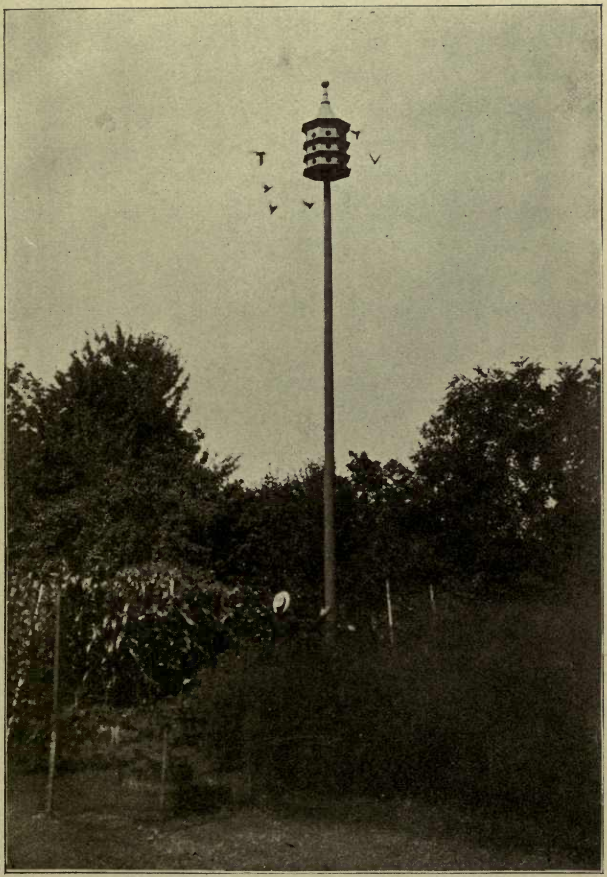
a little insect-powder will not only make impossible all annoyance, but will also help to keep the little birds clean and happy.

As to the Barn Swallow, if a hole is left in the gable of our barns, or a window is always left open, and small shelves are nailed on beams for the nests, there is no reason why this beautiful bird should not take up his residence more generally in our barns and to the same extent on the Pacific as on the Atlantic coast.

The Western Martin and the Bluebird are both fond of a box on the gable end of a house or barn, and of the bird-house upon a pole already referred to. A picture is here given of a Martin-house in Worcester, Mass., in which nine pairs of Martins made a happy home in the summer of 1901.

The Wrens can be given their opportunity in a corner under the roof of porch or piazza, and about our outbuildings.

As to Bird Houses: I am indebted for a good part of the following suggestions in this matter to the most admirable book of its kind yet published, "Our Native Birds, How to Protect and Attract them to our Homes," by D. Lange,



Martin House.

Superintendent of Nature Study in the public schools of St. Paul, Minnesota.

Boxes are best when made out of sections of hollow trees, or limbs, the holes having a diameter of from three to eight inches.

Boxes made of slab-wood are next in value. The bark on the boxes seems to induce the birds to undertake housekeeping when plain boards do not. But the bark should never be nailed on boards, because in the heat and rain, it warps, and vermin swarm beneath it. A fir-bark roof, projecting on each side, may, however, be put upon a box with advantage, — the curve in the bark gives ventilation, which should be provided in the tops of all bird-houses.

Next to slab-wood, unplaned or rough-sawed boards are best. If planed boards must be used, rub them with moist earth, or, if the boxes are to be used in trees bearing leaves, they may be painted green.

The boxes should be made of different sizes, adapted to the several kinds of birds for which they are constructed. For Wrens, let the box be 7 x 5 x 5 inches on the inside, with a hole, a very little larger than a twenty-five-cent piece,

about two inches from the top, and a shelf a little below the entrance. Bird-boxes should be deeper than they are wide, — in this case, the box would be seven inches deep.

For Swallows, the box should be 8 x 6 x 6 inches; location of hole and shelf, as before; size of hole, one and one-half inches.

For Bluebirds, 10 x 6 x 6; entrance, nearer the bottom; hole, 2 x 2½ inches in diameter; shelf, if desired.

For Martins, 10 x 8 x 8; entrance, 2½ inches, and near the top, with or without shelf.

Boxes in trees about the house are excellent, and Woodpeckers, Chickadees, and Nuthatches may be added to the domestic bird-circle.

A Wren-box will do for the Chickadees; for the Nuthatches, the box should be 20 x 6 x 6 (20 inches deep); entrance near the top, 2 x 2½ inches; no shelf.

For the Woodpeckers, the box should be from 10 to 36 inches in depth, and from 5 to 7 inches square at the base; entrance, 2 x 4 inches, and near the top; no shelf.

The boxes for the Chickadees should be placed from six to twelve feet from the ground; for the

Nuthatches, twelve to twenty-five feet; for the Woodpeckers, ten to twenty feet. And the boxes for these birds would serve best on dead, or partly dead, trees.

All boxes should be put on the east or the north side of buildings, or of trees, — if the trees are dead, away from the prevailing storms and from the noon, or afternoon, sun which would work misery and death to the young.

The houses must be bound by strong wire, or nailed, or screwed solidly, where no twigs or limbs moved by the wind, will strike them. Birds will not stay in shaky or jostled boxes.

In order to secure the boxes to the birds for which they are built, the English Sparrow should be disposed of as kindly as possible — but disposed of he must be. The father of the family may best undertake this serious business.*

Several boxes may be placed upon one pole by means of arms. It is well to set the pole not far from trees. Birds do not like to fly

* A very successful poisoned-food experiment has been thoroughly tried by Dr. C. F. Hodge, of Clark University, Worcester, Mass. The directions for its preparation and use may be obtained from the John Burroughs Bird Society, Portland, Oregon.

The recipe furnished by the Agricultural Bureau at Washington is said, by those who have tried it, not to be altogether successful.

over wide, open, and exposed spaces to their nests.

Some tin nailed around the pole which holds the bird-houses will prevent cats from climbing to the nests, or barbed wire may be bound about tree or pole for about a foot or two, having the barbs as thick as possible. If put upon a growing tree, a strip of wood should be nailed on either side of the tree-trunk. These strips make the wire elastic, and save the cutting of the bark.

Never try to clean out the boxes between seasons. Leave this to the birds.

The first condition for bringing many species of song-birds to us is that there must be trees and shrubs about our homes. If there are not, we must grow them. Two or three trees in a yard, dead or partially dead, are necessary to some species of birds. To save offense to the eye, the dead tree may be covered with Virginia creeper or some other rapidly growing vine. Some evergreens, spruce, pine and cedar, are of advantage; and a variety of deciduous trees, some of which have thick foliage, are a part of

the bird-equipment. A Lombardy poplar will serve better than any other for certain nests. On account of its rapid growth it may be cut off or down occasionally, to prevent its attaining an awkward and undesirable height.

More important than trees, for some species of birds, are bushes, with some wild tangle, which may be kept within bounds by the aid of pruning-knife and shears. No greater ornament is now sought for expensive grounds and parks than the wild tangle, which farmers cut down to "clean up" roadsides and around fences. Let the tangle be, except for cutting back, unless the ground is positively needed for another purpose.

As to Feeding Birds: Provision for bird-food must be made, if they are to live with us. Wild trees and shrubs that bear berries must be near at hand for birds that depend upon this kind of food. Insectivorous birds will find a supply for their young and themselves unless the season becomes too dry, in which case chopped meat, bits of bread, and a little beef-suet will save misery, not to say furnish happiness.

More important than feeding at such a time, and important at all times, unless one's home is near a lake or a running stream, is water. Dishes two inches deep filled with water, standing about on the ground and changed often for cleanliness, should be provided. Dripping pans, painted inside and out to keep them from rusting, are best. But large flower-pot saucers are good. Whatever is used should be unglazed, so as to give secure footing for the birds. The birds will drink and bathe even in cold and freezing weather, if the ice does not prevent. A dripping pan of road-dust for a dust-bath, should there be none otherwise convenient, will be often used, if provided. All wild birds have more or less vermin upon them, each having its own kind, and the dust-bath is their chief defence against these parasites.

In summer time, it is not well, under ordinary conditions, to feed the birds much, lest they lose their independence and suffer when they are compelled to support themselves. Enough feeding to cultivate friendliness, is always in order. And in winter time, one may indulge one's self to the utmost limit, provided our feathered de-

pendents are not sometimes forgotten when "the cold snap" and snow and ice make food hardest to get, and our supply of yesterday for the birds is covered up, perhaps.

For winter feeding, as indicated already, beef-suet, in small pieces (if large they will soil the wings and injure the flight of the birds), may be tied or nailed to a limb; or a bone with meat upon it, or a piece of cheese-rind may be tied in the same place. The limb may be very near a house. Indeed an evergreen limb may be cut and fastened to the window-sill and hold the food. Again, there may be attached to the window-sill a rimmed shelf with chopped meat, suet, nuts and bird-seed upon it, which, with a little care, will bring to our very eyes and hands, Chickadees, Nuthatches, Juncos and other birds. Sunflower and hemp seeds are relished by many birds and will be an excellent winter diet. Let the placing of the food be always associated with a soft whistle or call, and the birds will soon come to you as do chickens to a human summons.

But in vain will be our vines and trees and tangles, we shall have no birds to nest and none

to feed, unless we give them protection from enemies and from annoyance. Cats, jays and crows must be kept from trespassing.

Few of us have any proper ideas of how to train and keep a pussy. Cats can be trained so as to be quite as respectful to birds as to young chickens, if the same, or a little greater, trouble is taken. Most cats grow up perfectly obedient to natural instincts, and with no sense of obedience to human beings. Few persons probably take the trouble to educate the family kitten. But all may, with a little effort, subject the cat to a course of discipline every year which will be wholesome for the cat, and will save the lives of scores of birds, old and young.

An unrestrained cat is as senseless in bird-time as an unrestrained horse or cow would be amongst growing crops. In these days of cheap poultry wire, a commodious cage may easily be made, in which pussy should pass her nights and such part of the days, during the nesting-season, as she cannot be watched. If well fed, the cat will not be unhappy, and she will be a more civilized member of the family for such temporary and kindly restraint. Wild, vaga-

bond cats should be mercifully put out of life, and neighbors' cats must be made unwelcome.

Birds soon learn that we are their friends. They have been often reported as coming to the windows of their human sympathizers for assistance in time of distress.

A word now about cultivating, with the birds, an intimacy that will bring them to our feet and possibly to our heads and hands. Celia Thaxter, in "An Island Garden," tells us how the birds used to rest on her person. In the following extract, she is writing especially of the Humming-birds:

"I shall never forget the surprise of joy that filled me when one for the first time alighted on my sleeve and rested, as much at home as if I were a stick or a harmless twig. Sparrows and Nuthatches had often alighted on my head as I stood musing over my flowers, perfectly still, but to have this tiny spark of brilliant life come to anchor, as it were, on anything so earthly as my arm was indeed a nine days' wonder. Now, it has grown to be an old story, but it is never any less delightful."

This confidence was born of the experience of the birds with this gentle woman. Any one, by putting food down in a certain place, in small quantities at a time, accompanying the act with some soft and musical whistle, or low, soft, winning call, will soon be associated, in the mind of the bird, with the gift; and if he stands quietly and from time to time nearer to the birds, he will, ere long, have them at his feet and perhaps eating out of his hand.

The story of a young Cedar Waxwing in Worcester, Mass., will give a hint as to what may be done in all our homes. Overloaded with cherries, he was taken into a bird-lover's home to be kept from the cats till he recovered from his cherry-spree. Gentle treatment made the bird a member of the family in a few hours, not in a cage, but free to go and come. In two pictures which I have of him, he is sitting upon a child's hand with as perfect confidence as that with which the child would sit upon its mother's lap. One of these pictures I am enabled to give the readers of this book, through the kindness of Dr. C. F. Hodge, of Clark University. If the fledglings of all sorts, that drop to the ground

around our homes, were taken in and treated considerately, they would come back in the next spring's migration, much more susceptible to our winning arts, bringing with them familiar memories of our former kindness.

Dr. Hodge, who thus tamed the Waxwing, gives us the suggestion of a way to save grown birds the agony of fear which they usually endure when, out of kindness, taken into temporary captivity. Put the birds in a suitable cage, provided with a little food and water, if they can feed themselves. Wait until the food is gone, then begin to feed them, using a stick which should be long enough not to frighten them by your too close presence at the cage. Upon the end of the stick, place the most tempting food (meal-worms for nearly all birds), and slowly put it before them; after even a time or two, you may hold the stick near the feeding-end, and soon your hand may carry the food, and before you are quite ready for it, the cage being opened, the bird will go to meet you.

All birds, in temporary captivity, that can feed themselves, will be somewhat older than mere fledglings. The latter never feed themselves,

and will be entirely dependent upon the food placed in their gaping mouths. Young birds, apparently grown and able to pick up their own nourishment, may not yet have learned to do it. If the birds are only fledglings with wide-open mouths, they must be fed every hour in daylight, with suitable food, and given water occasionally.

What joy-giving rewards will come from such a ministry to fledglings and injured birds, Dr. Hodge bears witness. In these pages, he generously furnishes two pictures of "Bob," a young robin, that, until it left for its Southern winter home, would come at call and alight upon the hand of the friends whom it had learned to know. In one of the pictures, it is standing on the hand of Dr. Hodge's son, who, when he was younger, held the Waxwing (before described); in the other, it has the company of a fledgling upon the hand of the young woman who kindly permits the use of the picture. "Bob" started South in the autumn of 1901, with a ring upon one of his legs, put there by Dr. Hodge, to identify him upon his return, which is certain to take place unless accident should prevent.

Boy and Robin ("*Bob*").

Dr. Hodge gives a charge which must be strictly observed if we are to keep the confidence of the birds thus tamed. They must not be handled; neither at first, nor even after they sit upon our arms or rest upon our shoulders. Dr. Hodge relates that the Waxwing, even after a long period of familiarity, could not endure this demonstration, except once or twice, when very cold. Our human disposition to seize every moving and wild thing, not harmful, must be restrained. The cage, of course, should be abolished as soon as the bird comes freely to us, that he may come and go, through open windows and doors, as he will. It will be interesting to those who read this chapter to know that the Waxwing became a bird-missionary in all of the public schools of Worcester, Mass., visiting each in turn, and, by his free presence, pleading that such treatment as he had received might be given to all birds by all children. As a result, Worcester is perhaps the banner city in the United States in the protection and rearing of wild birds.

One of the charming things in the rearing of

wild birds about our homes is their looked-for return in the spring. The same birds will return to our bird-houses and trees, from year to year, unless something should befall them in their winter home or during migration.

"No longer now the wingèd habitants,
That in the woods their sweet lives sing away,
Flee from the form of man; but gather round,
And preen their sunny feathers on the hands
Which little children stretch in friendly sport
Towards these dreadless partners of their play."

—*Shelley.*

SIZE KEY

GROUP 1 — Birds smaller than the English Sparrow (or apparently so).

Black-chinned Hummingbird.
Rufous Hummingbird.
Allen's Hummingbird.
Calliope Hummingbird.
Redpoll.
Willow Goldfinch.
Arkansas Goldfinch.
European Goldfinch (imported).
Pine Siskin.
Western Chipping Sparrow.
Lazuli Bunting.
Warbling Vireo.
Cassin's Vireo.
Lutescent Warbler.
Yellow Warbler.
Myrtle Warbler.
Audubon's Warbler.
Black-throated Gray Warbler.
Pacific Yellow-throat.
Pileolated Warbler.
Northwestern Vigors's Wren.
Parkman's Wren.
Western Winter Wren.
Tulé Wren.
Sierra Creeper.
Slender-billed Nuthatch.
Red-breasted Nuthatch.
Oregon Chickadee.
Chestnut-backed Chickadee.
Coast Wren-Tit.
Bush-Tit.
Western Golden-crowned Kinglet.
Ruby-crowned Kinglet.

GROUP 2 — Birds about the size of the English Sparrow (or apparently so).

Least Sandpiper.
Western Sandpiper.
Western Wood Pewee.
Western Lark Sparrow.
Gambel's White-crowned Sparrow.

Western Flycatcher.
Traill's Flycatcher.
California Purple Finch.
American Crossbill.
Snowflake.
Oregon Vesper Sparrow.
Western Savanna Sparrow.
Nuttall's White-crowned Sparrow.
Oregon Junco.
Rusty Song Sparrow.
Macgillivray's Warbler.
Titlark, or American Pipit.
Rock Wren.

GROUP 3 — Birds larger than the English Sparrow, and smaller than the Robin (or apparently so).

Northern Phalarope.
Red-backed Sandpiper.
California Pygmy Owl.
Gairdner's Woodpecker.
Red-breasted Sapsucker.
Poorwill.
Black Swift.
Vaux's Swift.
The Kingbird.
Arkansas Kingbird.
Say's Phœbe.
Western Black Phœbe.
Olive-sided Flycatcher.
Skylark.
Streaked Horned Lark.
Dusky Horned Lark.
Starling.
Red-winged Blackbird.
Golden-crowned Sparrow.
Townsend's Sparrow.
Oregon Towhee, or Chewink.
Black-headed Grosbeak.
Louisiana Tanager.
Western Martin.
Cliff Swallow.
Barn Swallow.
Tree Swallow.
Violet-green Swallow.
Bank Swallow.
Rough-winged Swallow.
Cedar Waxwing.
Long-tailed Chat.
Water Ouzel, or American Dipper.
Sage Thrasher.

Bullock's Oriole.
Western Evening Grosbeak.
Russet-backed Thrush.
Western Bluebird.
Mountain Bluebird.

GROUP 4 — Birds about the size of the Robin (or apparently so).

Black Tern.
Killdeer.
Mourning Dove.
Desert Sparrow-Hawk.
Burrowing Owl.
Harris's Woodpecker.
Californian Woodpecker.
Western Nighthawk.
Yellow-headed Blackbird.
Bicolored Blackbird.
Western Meadowlark.
Brewer's Blackbird.
Varied Thrush, or Varied Robin.

GROUP 5 — Birds larger than the Robin.

Pacific Kittiwake.
Bonaparte's Gull.
Arctic Tern.
Band-tailed Pigeon.
Sharp-shinned Hawk.
Pigeon-Hawk.
Black Merlin.
Kennicott's Screech Owl.
MacFarlane's Screech Owl.
California Cuckoo.
Belted Kingfisher.
Lewis's Woodpecker.
Red-shafted Flicker.
Northwestern Flicker.
California Jay.
Gray Jay.
Piñon Jay.

GROUP 6 — Birds much larger than the Robin.

Glaucus-winged Gull.
Western Gull.
American Herring Gull.
Ferruginous Rough-legged Hawk.
Golden Eagle.

California Gull.
Ring-billed Gull.
Short-billed Gull.
American Bittern.
Great Blue Heron.
Green Heron.
Marsh-Hawk.
Cooper's Hawk.
Western Red-tailed Hawk.
Swainson's Hawk.
American Rough-legged Hawk.
Bald Eagle.
American Osprey, or Fish-Hawk.
Short-eared, or Marsh Owl.
Dusky Horned Owl.
Northern Pileated Woodpecker.
American Magpie.
Steller's Jay.
American Raven.
American Crow.
Northwest Crow.
Clarke's Nutcracker.

COLOR KEY.*

Blue and Bluish.

Lazuli Bunting (2).
Western Bluebird (3).
Mountain Bluebird (3).
Mourning Dove (5).
Belted Kingfisher (5).
California Jay (5).
Gray Jay (5).
Piñon Jay (5).
Glaucus-winged Gull (6).
American Herring Gull (6).
California Gull (6).
Ring-billed Gull (6).
Great Blue Heron (6).
Band-tailed Pigeon (6).
Steller's Jay (6).

* The birds in this Color Key are arranged according to size, the numbers at the right showing to which group in the Size Key they belong.

Pearl Color.

Pacific Kittiwake (5).
Bonaparte's Gull (5).
Arctic Tern (5).
Short-billed Gull (6).

Lead Color.

Northern Phalarope (3).
Black Tern (4).
Western Gull (6).

Markedly Red of Any Shade.

Rufous Hummingbird (1).
Allen's Hummingbird (1).
Calliope Hummingbird (1).
Redpoll (1).
European Goldfinch (1).
California Purple Finch (2).
American Crossbill (2).
Red-backed Sandpiper (3).
Red-breasted Sapsucker (3).
Red-winged Blackbird (3).
Bullock's Oriole (3.)
Louisiana Tanager (3).
Californian Woodpecker (4).
Bicolored Blackbird (4).
Western Robin (4).
Red-shafted Flicker (5).
Northwestern Flicker (5).
Ferruginous Rough-legged Hawk (6).

Markedly Yellow, or Orange.

Willow Goldfinch (1).
Arkansas Goldfinch (1).
Lutescent Warbler (1).
Yellow Warbler (1).
Audubon's Warbler (1).
Pacific Yellow-throat (1).
Pileolated Warbler (1).
Long-tailed Chat (3).
Western Evening Grosbeak (3).
Yellow-headed Blackbird (4).
Western Meadowlark (4).
Varied Thrush, or Varied Robin (4).
American Bittern (6).

Markedly Black.

Black-chinned Hummingbird (1).
Black-throated Gray Warbler (1).
Black Swift (3).
Vaux's Swift (3).
Western Black Phœbe (3).
Starling (3).
Red-winged Blackbird (3).
Oregon Towhee (3).
Western Martin (3).
Black-headed Grosbeak (3).
Yellow-headed Blackbird (4).
Bicolored Blackbird (4).
Brewer's Blackbird (4).
Black Thrush (Imported) (4).
American Raven (6).
American Crow (6).
Northwest Crow (6).

Black and White.

Gairdner's Woodpecker (3).
Harris's Woodpecker (4).
Californian Woodpecker (4).
American Magpie (6).
Clarke's Nutcracker (6).

Dusky, Gray, or Slaty.

Myrtle Warbler (1).
Audubon's Warbler (1).
Slender-billed Nuthatch (1).
Red-breasted Nuthatch (1).
Bush-Tit (1).
Western Wood Pewee (2).
Western Flycatcher (2).
Traill's Flycatcher (2).
Oregon Junco (2).
Macgillivray's Warbler (2).
The Kingbird (3).
Arkansas Kingbird (3).
Olive-sided Flycatcher (3).
Water Ouzel (3).

REDDISH–BROWN, DARK BROWN, OR BROWNISH–BLACK.

Sierra Creeper (1).
Chestnut-backed Chickadee (1).
Coast Wren-Tit (1).
Least Sandpiper (2).
Western Sandpiper (2).
Snowflake (2).
Rusty Song Sparrow (2).
Red-backed Sandpiper (3).
California Pygmy Owl (3).
Cedar Waxwing (3).
Russet-backed Thrush (3).
Song Thrush (Imported) (3).
Killdeer (4).
Desert Sparrow-Hawk (4).
Western Nighthawk (4).
Black Merlin (5).
Green Heron (6).
Western Red-tailed Hawk (6).
Ferruginous Rough-legged Hawk (6).
Golden Eagle (6).
Bald Eagle (6).
American Osprey (6).
Marsh Owl (6).
Dusky Horned Owl (6).

MARKEDLY DARK.

Oregon Chickadee (1).
Western Black Phœbe (3).
Cliff, or Eave Swallow (3).
Barn Swallow (3).
Tree, or White-bellied Swallow (3).
Bank Swallow (3).
Rough-winged Swallow (3).
Lewis's Woodpecker (5).
Northern Pileated Woodpecker (6).

GREEN, OLIVE, OR OLIVE–GRAY.

Warbling Vireo (1)
Cassin's Vireo (1).
Ruby-crowned Kinglet (1).
Western Golden-crowned Kinglet (1).
Violet-green Swallow (3).
Green Heron (6).

BROWN, BROWNISH, GRAYISH, OR SPARROWISH-GRAY.

Pine Siskin (1).
Western Chipping Sparrow (1).
Northwestern Vigors's Wren (1).
Parkman's Wren (1).
Western Winter Wren (1).
Tulé Wren (1).
English Sparrow (2).
Oregon Vesper Sparrow (2).
Western Savanna Sparrow (2).
Western Lark Sparrow (2).
Gambel's Sparrow (2).
Nuttall's Sparrow (2).
Titlark, or American Pipit (2).
Rock Wren (2).
Poorwill (3).
Say's Phœbe (3).
Skylark (3).
Streaked Horned Lark (3).
Golden-crowned Sparrow (3).
Townsend's Sparrow (3).
Sage Thrasher (3).
Pigeon-Hawk (4).
Burrowing Owl (4).
Dusky Horned Lark (4).
Kennicott's Screech Owl (5).
MacFarlane's Screech Owl (5).
Sharp-shinned Hawk (5).
Cooper's Hawk (5).
California Cuckoo (5).
Marsh-Hawk (6).
American Rough-legged Hawk (6).
Swainson's Hawk (6).

BIRDS GROUPED IN FAMILIES.

SCIENTIFIC ORDER.

ORDER — LONGIPENNES. (*Long-winged Swimmers.*)

FAMILY — LARIDÆ. (*Gulls and Terns.*)

Pacific Kittiwake. (Rissa tridactyla pollicaris.) Ridgw.
Glaucus-winged Gull. (Larus glaucescens.) Naum.
Western Gull. (Larus occidentalis.) Aud.
American Herring Gull. (Larus argentatus smithsonianus.) Coues.
California Gull. (Larus californicus.) Lawr.
Ring-billed Gull. (Larus delawarensis.) Ord.
Short-billed Gull. (Larus brachyrhynchus.) Rich.
Bonaparte's Gull. (Larus philadelphia.) (Ord.)
Arctic Tern. (Sterna paradisæa.) Brünn.
Black Tern. (Hydrochelidon nigra surinamensis.) (Gmel.)

ORDER — HERODIONES. (*Herons, Storks, Ibises, etc.*)

FAMILY — ARDEIDÆ. (*Herons, Bitterns, etc.*)

American Bittern. (Botaurus lentiginosus.) (Montag.)
Great Blue Heron. (Ardea herodias.) Linn.
Green Heron. (Ardea virescens.) Linn.

ORDER — LIMICOLÆ. (*Shore Birds.*)

FAMILY — PHALAROPODIDÆ. (*Phalaropes.*)

Northern Phalarope. (Phalaropus lobatus.) (Linn.)

FAMILY — SCOLOPACIDÆ. (*Snipes, Sandpipers, etc.*)

Least Sandpiper. (Tringa minutilla.) Vieill.
Red-backed Sandpiper. (Tringa alpina pacifica.) (Coues.)
Western Sandpiper. (Ereunetes occidentalis.) Lawr.

FAMILY — CHARADRIIDÆ. (*Plovers.*)

Killdeer. (Ægialitis vocifera.) (Linn.)

ORDER — COLUMBÆ. (*Pigeons.*)

FAMILY. — COLUMBIDÆ. (*Pigeons.*)

Band-tailed Pigeon. (Columba fasciata.) Say.
Mourning Dove, or Turtle Dove. (Zenaidura macroura.) (Linn.)

ORDER — RAPTORES. (*Vultures, Hawks, and Owls.*)

FAMILY — FALCONIDÆ. (*Vultures, Falcons, Hawks, Eagles, etc.*)

Marsh-Hawk. (Circus hudsonius.) (Linn.)
Sharp-shinned Hawk. (Accipiter velox.) (Wils.)
Cooper's Hawk. (Accipiter cooperii.) (Bonap.)
Western Red-tailed Hawk. (Buteo borealis calurus.) (Cass.)

Swainson's Hawk. (Buteo swainsoni.) Bonap.

American Rough-legged Hawk. (Archibuteo lagopus sancti-johannis.) (Gmel.)

Ferruginous Rough-legged Hawk. (Archibuteo ferrugineus.) (Licht.)

Golden Eagle. (Aquila chrysaëtos.) (Linn.)

Bald Eagle. (Haliæëtus leucocephalus.) (Linn.)

Pigeon-Hawk. (Falco columbarius.) Linn.

Black Merlin. (Falco columbarius suckleyi.) Ridgw.

Desert Sparrow-Hawk. (Falco sparverius deserticolus.) Mearns.

Fish-Hawk, or American Osprey. (Pandion haliaëtus carolinensis.) (Gmel.)

FAMILY — BUBONIDÆ. (*Horned Owls, etc.*)

Short-eared, or Marsh Owl, (Asio accipitrinus.) (Pall.)

Kennicott's Screech Owl. (Megascops asio kennicottii.) (Elliot.)

MacFarlane's Screech Owl. (Megascops asio macfarlanei.) Brewst.

Dusky Horned Owl. (Bubo virginianus saturatus.) Ridgw.

Burrowing Owl. (Speotyto cunicularia hypogæa.) (Bonap.)

California Pygmy Owl. (Glaucidium gnoma californicum.) (Scl.)

ORDER — COCCYGES. (*Cuckoos and Kingfishers.*)

FAMILY — CUCULIDÆ. (*Cuckoos, Anis, etc.*)

California Cuckoo. (Coccyzus americanus occidentalis.) Ridgw.

FAMILY — ALCEDINIDÆ. (*Kingfishers.*)

Belted Kingfisher. (Ceryle alcyon.) (Linn.)

ORDER — PICI. (*Woodpeckers.*)

FAMILY — PICIDÆ. (*Woodpeckers.*)

Harris's Woodpecker. (Dryobates villosus harrisii.) (Aud.)

Gairdner's Woodpecker. (Dryobates pubescens gairdnerii.) (Aud.)

Red-breasted Sapsucker. (Sphyrapicus ruber.) (Gmel.)

Northern Pileated Woodpecker. (Ceophlœus pileatus abieticola.) Bangs.

Californian Woodpecker. (Melanerpes formicivorus bairdi.) Ridgw.

Lewis's Woodpecker. (Melanerpes torquatus.) (Wilson.)

Red-shafted Flicker. (Colaptes cafer collaris.) (Vig.)

Northwestern Flicker. (Colaptes cafer saturatior.) (Ridgw.)

ORDER — MACROCHIRES. (*Goatsuckers, Swifts, and Hummingbirds.*)

FAMILY — CAPRIMULGIDÆ. (*Goatsuckers.*)

Poorwill. (Phalænoptilus nuttallii.) (Aud.)

Western Nighthawk. (Chordeiles virginianus henryi.) (Cass.)

FAMILY — MICROPODIDÆ. (*Swifts.*)

Black Swift. (Cypseloides niger borealis.) (Kennerly.)

Vaux's Swift. (Chætura vauxii.) (Towns.)

FAMILY — TROCHILIDÆ. (*Hummingbirds.*)

Black-chinned Hummingbird. (Trochilus alexandri.) Bourc and Muls.
Rufous Hummingbird. (Selasphorus rufus.) (Gmel.)
Allen's Hummingbird. (Selasphorus alleni.) Hensh.
Calliope Hummingbird. (Stellula calliope.) Gould.

ORDER — PASSERES. (*Perching Birds.*)

FAMILY — TYRANNIDÆ. (*Flycatchers.*)

The Kingbird. (Tyrannus tyrannus.) (Linn.)
Arkansas, or Western Kingbird. (Tyrannus verticalis.) Say.
Say's Phœbe. (Sayornis saya.) (Bonap.)
Western Black Phœbe. (Sayornis nigricans semiatra.) (Vig.)
Olive-sided Flycatcher. (Contopus borealis.) (Swains.)
Western Wood Pewee. (Contopus richardsonii.) (Swains.)
Western Flycatcher. (Empidonax difficilis.) Baird.
Traill's Flycatcher. (Empidonax Traillii.) (Aud.)

FAMILY — ALAUDIDÆ. (*Larks.*)

Skylark. (Alauda arvensis.) Linn.
Streaked Horned Lark. (Otocoris alpestris strigata.) Hensh.
Dusky Horned Lark. (Otocoris alpestris merrilli.) Dwight.

FAMILY — CORVIDÆ. (*Crows, Jays, Magpies, etc.*)

American Magpie. (Pica pica hudsonica.) (Sab.)
Steller's Jay. (Cyanocitta stelleri.) (Gmel.)
California Jay. (Aphelocoma californica.) (Vig.)
Gray Jay. (Perisoreus obscurus griseus.) Ridgw.
American Raven. (Corvus corax sinuatus.) (Wagl.)
American Crow. (Corvus Americanus.) Aud.
Northwest Crow. (Corvus caurinus.) Baird.
Clarke's Nutcracker. (Nucifraga Columbiana.) (Wils.)
Piñon Jay. (Cyanocephalus cyanocephalus.) (Wied.)

FAMILY — STURNIDÆ. (*Starlings.*)

Starling. (Sturnus vulgaris.) Linn.

FAMILY — ICTERIDÆ. (*Blackbirds, Orioles, etc.*)

Yellow-headed Blackbird. (Xanthocephalus xanthocephalus.) (Bonap.)
Red-winged Blackbird. (Agelaius phœniceus.) (Linn.)
Bicolored Blackbird. (Agelaius gubernator californicus.) Nelson.
Western Meadowlark. (Sturnella magna neglecta.) (Aud.)
Bullock's Oriole. (Icterus bullocki.) (Swains.)
Brewer's Blackbird. (Scolecophagus cyanocephalus.) (Wagl.)

FAMILY — FRINGILLIDÆ. (*Sparrows, Finches, etc.*)

Western Evening Grosbeak. (Coccothraustes vespertinus montanus.) (Ridgw.)

California Purple Finch. (Carpodacus purpureus californicus.) Baird.

American Crossbill. (Loxia curvirostra minor,) (Brehm.)

Redpoll. (Acanthis linaria.) (Linn.)

Willow Goldfinch. (Astragalinus tristis salicamans.) (Grinnell.)

Arkansas Goldfinch (Astragalinus psaltria.) (Say.)

Pine Siskin. (Spinus pinus.) (Wils.)

Snowflake. (Passerina nivalis.) (Linn.)

English, or European House Sparrow. (Passer domesticus.) Linn.

Oregon Vesper Sparrow. (Pocœcetes gramineus affinis.) Miller.

Western Savanna Sparrow. (Ammodramus sandwichensis alaudinus.) (Bonap.)

Western Lark Sparrow. (Chondestes grammacus strigatus.) (Swains.)

Gambel's Sparrow. (Zonotrichia leucophrys gambelii.) (Nutt.)

Nuttall's Sparrow. (Zonotrichia leucophrys nuttalli.) Ridgw.

Golden-crowned Sparrow. (Zonotrichia coronata.) (Pall.)

Western Chipping Sparrow. (Spizella socialis arizonæ.) Coues.

Oregon Junco. (Junco hyemalis oregonus.) (Towns.)

Rusty Song Sparrow. (Melospiza melodia morphna.) Oberh.

Townsend's Sparrow. (Passerella iliaca unalaschcensis.) (Gmel.)

Oregon Towhee. (Pipilo maculatus oregonus.) (Bell.)
Black-headed Grosbeak. (Zamelodia melanocephala.) (Swains.)
Lazuli Bunting. (Cyanospiza amœna.) (Say.)

FAMILY — TANAGRIDÆ. (*Tanagers.*)

Louisiana Tanager. (Piranga ludoviciana.) (Wils.)

FAMILY — HIRUNDINIDÆ. (*Swallows.*)

Western Martin. (Progne subis hesperia.) Brewst.
Cliff, or Eave Swallow. (Petrochelidon lunifrons.) (Say.)
Barn Swallow. (Hirundo erythrogaster.) Bodd.
Tree Swallow. (Tachycineta bicolor.) (Vieill.)
Violet-green Swallow. (Tachycineta thalassina.) (Swains.)
Bank Swallow. (Clivicola riparia.) (Linn.)
Rough-winged Swallow. (Stelgidopteryx serripennis.) (Aud.)

FAMILY — AMPELIDÆ. (*Waxwings, etc.*)

Cedar Waxwing, or Cedarbird. (Ampelis cedrorum.) (Vieill.)

FAMILY — VIREONIDÆ. (*Vireos.*)

Warbling Vireo. (Vireo gilvus.) (Vieill.)
Cassin's Vireo. (Vireo solitarius cassinii.) (Xantus.)

FAMILY — MNIOTILTIDÆ. (*Wood Warblers.*)

Lutescent Warbler. (Helminthophila celata lutescens.) (Ridgw.)
Yellow Warbler. (Dendroica æstiva.) (Gmel.)

Myrtle Warbler. (Dendroica coronata.) (Linn.)
Audubon's Warbler. (Dendroica auduboni.) (Towns.)
Black-throated Gray Warbler. (Dendroica nigrescens.) (Towns.)
Macgillivray's Warbler. (Geothlypis tolmiei.) (Towns.)
Pacific Yellow-throat. (Geothlypis trichas arizela.) Oberholzer.
Long-tailed Chat. (Icteria virens longicauda.) (Lawr.)
Pileolated Warbler. (Wilsonia pusilla pileolata.) (Pall.)

FAMILY — MOTACILLIDÆ. (*Wagtails.*)

American Pipit. (Anthus pensilvanicus.) (Lath.)

FAMILY — CINCLIDÆ. (*Dippers.*)

American Dipper. (Cinclus mexicanus.) Swains.

FAMILY — TROGLODYTIDÆ. (*Wrens, Thrashers, etc.*)

Sage Thrasher. (Oroscoptes montanus.) (Towns.)
Rock Wren. (Salpinctes obsoletus.) (Say.)
Northwestern Vigors's Wren. (Thryomanes bewickii calophonus.) Oberholzer.
Parkman's Wren. (Troglodytes aëdon parkmanii.) (Aud.)
Western Winter Wren. (Anorthura hiemalis pacifica.) (Baird.)
Tulé Wren. (Cistothorus palustris paludicola.) Baird.

FAMILY — CERTHIIDÆ. (*Creepers.*)

Sierra Creeper. (Certhia familiaris zelotes.) Osgood.

FAMILY — PARIDÆ. (*Nuthatches and Tits.*)

Slender-billed Nuthatch. (Sitta carolinensis aculeata.) (Cass.)
Red-breasted Nuthatch. (Sitta canadensis.) Linn.
Oregon Chickadee. (Parus atricapillus occidentalis.) (Baird.)
Chesnut-backed Chickadee. (Parus rufescens.) Towns
Coast Wren-Tit. (Chamæa fasciata phæa.) Osgood.
Bush-Tit. (Psaltriparus minimus.) (Towns.)

FAMILY — SYLVIDÆ. (*Kinglets and Gnatcatchers.*)

Western Golden-Crowned Kinglet. (Regulus satrapa olivaceus.) Baird.
Ruby-crowned Kinglet. (Regulus calendula.) (Linn.)

FAMILY TURDIDÆ. (*Thrushes, Bluebirds, etc.*)

Russet-backed Thrush. (Hylocichla ustulata.) (Nutt.)
Western Robin. (Merula migratoria propinqua.) Ridgw.
Varied Thrush. (Hesperocichla nævia.) (Gmel.)
Western Bluebird. (Sialia mexicana occidentalis.) (Towns.)
Mountain Bluebird. (Sialia arctica.) Swains.

A COURSE OF STUDY UPON BIRDS FOR SCHOOLS AND BIRD-STUDENTS.

INASMUCH as this book has been chosen by the Text Book Commission of the State of Oregon to be used for "Supplementary Reading" in the Public Schools, the author feels himself called upon to make some suggestions to Principals and Teachers as to why the subject of Birds should be especially studied, also as to the way in which he thinks the book can be used to the greatest advantage.

Why should special attention be given to birds above other objects in nature?

The answer is, that nothing else in nature has, at the same time, such attractive, joy-inspiring and interesting qualities. Birds more than flowers, because they are not only beautiful, but they are beautiful in many ways and have beside so many uniquely engaging characteristics. Their colors are often as exquisite or as gorgeous as those of flowers, and in grace of form they are also equal, while they have, in addition, supreme grace of movement and the heavenly

gift of song. All these attractions they possess, but they have, too, active habits which invite the attention of even the least curious; their nest-building, their care of their young, their food habits and their migration; and more than all, they respond to the sympathetic heart of a human being.

As a source of happiness, nothing can equal an interest in the birds, except an interest in humanity itself. Especially should country children be introduced to this avenue of true joy, and through it to a love of Nature's infinite variety. It will make the fields, orchards and groves a section of veritable heaven to all those who through the birds get into sympathetic touch with Nature. If teachers and children do not together see and hear and know the birds about them, the life-long loss can be understood only by those who have been led into this beatific world of sympathy and living beauty.

Then, again, nothing in nature is more closely related to the vast vegetable world, which, next to the birds, furnishes us with the most happiness,— the trees, and shrubs, and flowers. The birds are their natural protectors from destruc-

tive insects, as they are also the protectors of the food-plants which we must raise upon our land to feed the people.

Since the modern science of Pedagogy demands that all Nature Study should be made objective, this book assumes that any interest aroused in the pupils, by reading its pages, will at once be made vital and permanent, by going from the book to the birds which the book has described.

By means of the Size and Color Keys, the birds referred to in the reading may be quite easily found. Once the identification and observation of birds have begun, a natural interest will lead pupils to include all the ground covered by this little book and more.

The book is purposely made of a size convenient for the pocket or the hand, for out-of-door use.

The reason for the order in which the birds are given is indicated at the beginning of Chapter V, "How to Name the Birds." But here there should be a pedagogical justification of what may

seem to some a confused and disordered succession of species. Established pedagogical psychology begins with interest in the individual, and advances, through observations of many individuals, to the associations which gradually lead to classification into families.

An objective interest must wait upon the presence of the birds in the given locality, and the presence of the birds will be determined largely by the season. A "seasonal order" is, therefore, for the most part, followed. But in a few instances in the book, birds are presented in families, because it is taken for granted that, after a time, pupils will be going from the birds they have seen to the book, rather than from the book to the birds; their convenience in the matter of reference will be served by grouping "The Gulls," "The Wrens" and some other families of birds, the members of which are already associated in the minds of the pupils.

The kind of interest assumed is clearly pointed out in the first chapter in this book, "A word to Beginners and Teachers." But it cannot be repeated too often that a living, sympathetic and æsthetic, and not a scientific, interest in bird-

life is the end here sought. John Burroughs, one of the greatest nature-lovers and prose-poets of any age, said in substance to the author while he was preparing this edition of this book: If only you can lead them (the pupils and also the readers of this book) to enjoy and sympathise with the birds!

A word upon what may seem to some a deficiency in the book, in that not more is said about the habits of the several birds described. Not only has consideration of the size of the book, which must be kept small enough for field use, prevented fuller statement, but the end of a true and living bird-interest is served by leaving the pupil to find out for himself what more can be known about each variety of the birds about his home. This is the method teachers employ in all other studies. They would stimulate their pupils to find their own way into any subject of study, giving them only "a start."

The presence of more half-tone pictures of the species of the birds noted, would not, to the author's mind, be altogether an advantage. And he is sure that colored plates would be a positive

detriment both to the objective interest and to the pleasure of the pupil. So much happiness depends, as all bird-students will testify, upon searching a little to identify the vocal and flitting feathered beauties.

The author deprecates, as stated elsewhere in Chapter I, the setting before the pupil in the schoolroom some dead substitute for the thing that he is to find alive outside.

A long trial (for years) of this method of "specimens," in the public schools of Worcester, Mass., is very instructive upon this point. So harmful was it found to be that some time ago the Superintendent of Schools in that city issued directions prohibiting the further use of dead birds in the study of this living subject. Instead, pupils are taught to come at once into sympathetic fellowship with the living birds themselves. And how close that fellowship may be is shown in a number of pictures in this book. The author would have been pleased had all of the illustrations been from living birds, for thus the end sought through the book would have been more fully realized.

Let the children, and men and women as well,

learn the art of taming birds till they come at call to the feet or even to the hand, as did the Grosbeaks, the Cedarbird and "Bob."

The descriptions in Chapter V begin with birds assumed to be in a given locality about February 1st, and the months are supposed to move on in the book through the next January, covering thus the whole year.

As may be seen, a teacher may begin at any point in the year, using that part of the book answering to the presence of certain kinds of birds in any given place. As for example, one may wish to begin the use of the book in December or January, and would, therefore, select the part that deals with "Winter Birds," turning back to the beginning of the chapter, "How to Name the Birds," in order to describe the birds to be found in February.

The author is indebted to Dr. Frank M. McMurry of the Teachers' College, Columbia University, New York City, for a careful reading and hearty approval of the statement above made, and also of the following course of study.

The course covers three years, but it is not given with the expectation that all of the pupils in our schools will follow it entirely through.

Pupils who have already passed into the Seventh and Eighth Grades, without having made the observations specified for the "First Year," should, of course, begin here.

First Year — Sixth Grade.

The first year should be devoted to learning to know by sight and song, as many as possible of the common birds about the homes of the pupils. Not all of those given in order in this book or in the following list will be found in every locality. But many of them will be seen in *nearly* all places.

The easiest way to become familiar with the songs and names of our feathered friends is to observe a small number of birds at a time.

In order to make the most out of the year's study, it will be helpful if we can observe a few birds each month at the time when certain species are most abundant near our homes. Some are always with us, but will more naturally invite our attention at one time than at another.

Some species will be flitting before our eyes and singing into our ears for several weeks, and we may give our attention to them at any time during the period of their active presence. But, in order to systematize our work and thus to keep from getting confused, it will be well to give our attention each month in the year to a certain number of varieties.

The first year, let the observation of the birds begin in February. The following scheme by months is given, but it should not be strictly adhered to, if other species are more common in a particular locality at a given time.

February.

Western Robin, Western Meadowlark, Western Evening Grosbeak, Rusty Song Sparrow, Red-shafted and Northwestern Flickers, Western Bluebird, Mountain Bluebird, Brewer's Blackbird, Western Winter Wren, Crows, some of the Hawks and Owls.

March.

The Oregon Towhee, or Chewink ("Catbird"), some of the Woodpeckers, Audubon's Warbler, Vigors's Wren, Skylark, Horned Larks, Rufous

Hummingbird, the other Blackbirds. Crows, and Hawks again, and some of the Jays.

APRIL.

California Purple Finch, Willow Goldfinch, Arkansas Goldfinch, Nuttall's and Gambel's White-crowned Sparrows, Golden-crowned Sparrow, Pine Siskin, Parkman's House Wren, Western Chipping Sparrow, Pacific Yellow-throat and the other Sparrows, or as many as can be observed.

MAY.

The Swallows, Western Purple Martin, Yellow and Lutescent Warblers, Macgillivray's Warbler, Cedar-bird, or Wax-wing, Cassin's and the Warbling Vireos, Bullock's Oriole, Black-headed Grosbeak, and Russet-backed Thrush.

JUNE.

Lazuli Bunting, Louisiana Tanager, the Fly-catchers, Long-tailed Chat, Sage Thrasher, Black-throated Gray Warbler, Pileolated Warbler, Tulé Wren, Great Blue Heron, California Cuckoo, Western Night-hawk, Poorwill.

Teachers may recommend for vacation observation the following:

JULY.

Water Ouzel, Kingfisher, Fish-Hawk and the Woodpeckers and Jays not observed before. The Swifts, Mourning Dove and Band-tailed Pigeon.

AUGUST AND SEPTEMBER.

Hawks and Owls not observed before, Western Gull, Sandpipers, Northern Phalarope, Killdeer, Raven.

NOVEMBER, DECEMBER, JANUARY.

Inland, in November as well as in December and January, special attention should be given to the Winter Birds that are with us only at that time, or are then particularly in evidence and nearer our homes.

Observation of some of these, the Kinglets, will carry us into February again.

During these months, pupils who live near the water will be interested in the Gulls which are upon our bays, inlets, and harbors, and on the piers of our seaports.

In February and March, and again later, let the chapter upon "How to Domesticate and Tame Birds" be read, and its directions applied.

Along with the use of this book and observations of the birds during the year, prose and poetry should be read and some of the simpler bird poems learned; the following are suggested as among selections suitable for the purpose:

POETRY.

Sir Robin, *Lucy Larcom.* Piccola and Sparrow, *Celia Thaxter.* The Brown Thrush, *Lucy Larcom.* A Child's Question, *S. T. Coleridge.* The Golden Robin, *Celia Thaxter.* The Bird's Orchestra, *Celia Thaxter.* Yellow Bird, *Celia Thaxter.*

PROSE.

Home Studies in Nature, *Mrs. Treat.* "Story of Little Billee," from Birds and all Nature, *Caroline C. Bascom.* Second Book of Birds, *Olive Thorne Miller.* Everyday Birds, *Bradford Torrey.* Citizen Bird, *Mabel O. Wright.* Mr. Chupes and Miss Jenny, *Effie Bignell.*

The poems or prose, read or learned, should naturally relate to the birds already observed. There should be as few unknown facts as possible implied in this literature.

Second Year — Seventh Grade.

In this year, pupils should learn, through books, something about the general facts of bird-

life, doing this during the late autumn and in the early winter, when bird-life invites less out-of-door study. As the spring approaches, the birds that in the first year's course were not named, should be observed, and those already identified should be given further notice.

The following course is recommended: In the early autumn months, "Where have our birds gone?" "Where are they going?" "Something about migration." "In what Southern lands do certain species of our birds pass the winter?" "What do they do there?' "Do they nest?" "Why do they migrate?" "Is it the winter that occasions their going and coming, or is it food, — or both?"

Watch this year for the arrival of the birds, observing about what time the different species come to their summer homes.

In late January and in February, find further what birds will nest about our homes, and provide the necessary conditions to have them make their residence with us. Some birds need boxes to build their nests in, while there are others that will nest in our vines and shade-trees. See again Chapter VII in this book.

In March, April, May and June, let the subject be "Nesting." Through observation, learn where the different species nest; on the ground, in bushes, shrubs, trees, the kinds of trees, high or low.

The shapes of nests, pendant, round, etc. Material of nests of different kinds of birds: mud, grasses, etc.

What material can we furnish to help the birds in their nesting?

During nesting-time, special attention should be paid to the enemies of the smaller birds;—Cats, Crows and Jays.

In these months, also, notice the flights of birds. Notice the different kinds of flights, the direct, the undulating, the irregular; the grace of the Swallows and the Goldfinches; the splendid movement of the Flickers; the wonder of floating in air, as in the Swallow, etc.

In vacation, on the sea-shore, notice Water-birds,—the Snipes, and Summer Gulls. Notice also Land-birds which live near the sea-shore, the Western Savanna Sparrow, the Northwest Crow, etc. In the woods, especially in eastern

Oregon, notice the Jays, "Clarke's Crow," or "Nutcracker," etc.

Throughout the year, read poetry and prose upon Birds and Nature, committing to memory some of the poems. The following are suggested:

POETRY.

The Emperor's Bird-nest, *H. W. Longfellow.* Birds at Dawn, *Harriet E. Paine.* The Wren's Nest, *Dinah Mulock Craik.* Christmas in Norway, *Celia Thaxter.* What the Swallows Say, *Théophile Gautier.* The Kingfisher, *Celia Thaxter.* The Brown Thrasher, *Mabel Osgood Wright.*

PROSE.

Birds in the Bush: Chapters, "Bird-Songs," "Character in Feathers," "Minor Songsters," "A Bird-Lover's April," "A Month's Music," *Bradford Torrey.* Ways of Wood Folk: Chapters, "An Oriole's Nest," "Crow-ways," "Snowy Visitors," "A Christmas Carol," "A Fellow of Expedients," *William J. Long.*

Third Year — Eighth Grade.

During this year, a wider general knowledge of bird-life should be obtained, and a more particular and familiar acquaintance with local species of birds should be made.

In autumn and spring, study again and more objectively, "Migration." In the same months, observe Transient Birds, that is, birds that nest north of us and that can be seen only as they pass through our State in the spring and autumn,— such as the Golden-Crowned Sparrow, the Dwarf Hermit Thrush, *et al.*

In winter, Bird-food should be studied again, with reference to the usefulness of birds. The relation of birds to insect-life and to weeds; relation of the bills of the different species to different kinds of food, — the Finches to seed, etc.

Classification of birds in families,—*e.g.* Woodpecker Family, Thrush Family, etc.

Bird Structure, Coloration, and other such topics may be taken up. In the Bird-months, March, April, May and June, notice particularly the songs of birds. The different quality in different species; the different songs in the same species, — for instance, the very great variety in the Western Meadowlark; the different quality of voice in individuals of the same species. Write down, if you can, some of the songs of birds.

Mrs. Eckstorm's book, already referred to, may be read for some of the general information. Parts of "A First Book upon the Birds of Oregon and Washington," for Bird-songs and for some facts about the relation of Birds to insect-life and to weeds.

See for the general subjects also, Frank M. Chapman's "Bird-Life," Oliver Thorne Miller's "A First Book of Birds," and others. For a book of reference for birds of these States, not described in this book, Mrs. Florence Merriam Bailey's, "Hand-book of Western Birds." For teachers, an excellent book is Dr. C. F. Hodge's "Nature Study." — Ginn & Co., Boston. Read and learn some of the finer poems. Those by Wordsworth, Shelley and James Hogg, "To the Skylark," and by W. C. Bryant, "To the Waterfowl," are too reflective for the average boy and girl. They may, however, be spoken of as something to be read and learned later.

The following are within the experience of children of this grade:

POETRY.

Walter von der Vogelweid, *H. W. Longfellow.* The Great Blue Heron, *Celia Thaxter.* The Sing-

Away Bird, *Lucy Larcom.* The Happy Birds, *Celia Thaxter.* The Halo, *W. C. Gannett.* The Maryland Yellow-throat, *Henry van Dyke.* All Things Return, *R. W. Emerson.* The Sandpiper, *Celia Thaxter.* The Kingfisher, *Maurice Thompson.* The Kingfisher, *Isaac McLellan.* The Field Sparrow, *Lucy Larcom.* Sandpipers, *Duncan Campbell Scott.* A Band of Bluebirds (In Autumn), *Wm. H. Hayne.* Birds in Spring, *Margaret J. Preston.* The Bluebird, *John B. Tabb.* The Song-Sparrow, *Henry van Dyke.* The Bluebird, *Eben Eugene Rexford.* The Fisherman's Hymn, *Alexander Wilson.* Birds, *Ralph Waldo Emerson.*

The last eleven poems are from "Through the year with Birds and Poets," compiled by *Sarah Williams.*

PROSE.

Wake-Robin: Chapters, "The Return of the Birds," "Bird's-Nests," "The Bluebird," "Spring at the Capital," "The Invitation," "In the Hemlocks," *John Burroughs.* Fresh Fields: Chapters, "Impressions of some English Birds," "A Hunt for the Nightingale," "English and American Song-Birds," *John Burroughs.* Signs and Seasons: Chapters, "Hard Fare," "Winter Neighbors," "Bird-Enemies," *John Burroughs.* Locusts and Wild Honey: Chapters, "Birds and Birds," "Birds'-Nesting," *John Burroughs.* Birds and Poets: Chapters, "Birds and Poets," "April," "A Bird Medley," *John Burroughs.* Land of the Lingering Snow: Chapters, "Footprints in the Snow," "The First Bluebird," "The Coming of the Birds," "A Forest

Anthem," "The Secrets of the Meadow," "In the Wren Orchard," *Frank Bolles.* Blomidon to Smoky: Chapters, "Ways of the Owl," "Bird Traits," "Individuality in Birds," "Birds at Yuletide," "Up the Chimney," *Frank Bolles.* "The Footpath Way: Chapters, "A Widow and Twins," "The Male Ruby-throat," "Robin Roosts," "A Great Blue Heron," "The Passing of the Birds," *Bradford Torrey.*

The Birds of Killingworth, by H. W. Longfellow is somewhat obscure in parts, but passages may be selected from it that will be enjoyable and profitable reading for pupils in the Eighth Grade.

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GENERAL DESCRIPTION.

Date		
Upper parts		
Under parts		
Size		
Date		
Upper parts		
Under parts		
Size		

PARTICULAR DESCRIPTION.

Locality *Date*

Haunt

Length (tip of bill to end of tail)

Size and shape of bill

Length and shape of tail

Color

- *Forehead*
- *Crown*
- *Cheeks*
- *Nape*
- *Back*
- *Rump*
- *Upper tail-coverts*
- *Tail*
- *Wings*
- *Throat*
- *Breast*
- *Abdomen*

Voice

Movements, etc.

Remarks

LITERATURE UPON BIRDS OF OREGON AND WASHINGTON.

It will be of interest to some, perhaps to many, to see a list of the publications — as far as the author has found them — put forth by a number of persons at various times, upon the Birds of Oregon and Washington. It would be of very great service if as many of these as possible were gathered up and reprinted in some inexpensive and convenient form. At present, these papers are, for most persons, in inaccessible volumes.

These several papers contain reliable lists — with some descriptions of the habits — of birds found in southwestern Oregon, numbering 191; in northeastern Oregon, numbering 120 (eighty-eight of these not in the previous list); three lists of birds found in southwestern Washington; one list of 150 birds found in Chelan County, central Washington; and lists for three counties in eastern Washington; — making, for the two States, about 330 Land and Water Birds named in the several sections.

The publications referred to are as follows:

Reports made by Drs. Cooper and Suckley, the naturalists with the expedition sent out by the Government to make explorations and surveys to ascertain the most practicable route for a railroad to the Pacific coast. These reports include catalogues and descriptions of birds, and, in 1859, were published under the title of "Natural History of Washington Territory."

Notes on some of the Birds found in southeastern Oregon, particularly in the vicinity of Camp Harney, from November, 1874, to January, 1877; 191 species and sub-species. Captain Charles Bendire. Published in the Proceedings of the Boston Society of Natural History, in 1877. Vol. XIX.

Field Notes upon the Birds of Washington County, Oregon. A. W. Anthony. "The Auk," 1886. Vol. III.

List of Birds about Gray's Harbor, Washington. R. H. Lawrence. "The Auk," 1892. Vol. IX.

Notes on some Birds of Gray's Harbor, Washington. T. S. Palmer. "The Auk," 1892. Vol. IX.

Preliminary list of Birds of Okanogan County (now partly Chelan County), Washington. William Leon Dawson. "The Auk," 1897. Vol. XIV. "The Auk," 1901. Vol. XVIII.

List of Birds at Diamond Lake, Stevens County; Mt. Carleton, Spokane County; and Pullman, Whitman County. J. O. Snyder. "The Auk," 1900. Vol. XVII.

List of Birds about Cape Disappointment, Washington. W. H. Kobbé. "The Auk," 1900. Vol. XVII.

Many references to Oregon, Washington, and British Columbia are to be found in Belding's "Land and Water-birds of California," published by the California Academy of Sciences, in two volumes.

The most valuable book of all is Major Charles Bendire's monumental work, "Life Histories of North American Birds," printed by the Government in 1895. This work contains his observations of Oregon birds at Camp Harney, from 1874 to 1877, and also at Fort Klamath, in 1883.

Lists of birds with other local ornithological matter in the "Oregon Naturalist," of November

and December, 1895, and January, 1896, — published at that time in Portland, Oregon, — should be reprinted. "The Condor," the journal of the Cooper Ornithological Club of California, also contains some Oregon and Washington material answering the purpose. No doubt Mr. J. H. Bowles of Tacoma, Washington, would permit the publishing of a list of the birds of Puget Sound and vicinity, which he wrote down for private information. There is, undoubtedly, other matter which might be brought to light, should the publication suggested be seriously contemplated.

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